4

ECONOMIC ANALYSIS OF HUMAN SERVICES COSTS TO 2031 - RECOMMENDATIONS FOR ENHANCING HUMAN SERVICES PLANNING IN THE REGIONAL MUNICIPALITY OF YORK

The Community and Health Services Committee recommends:

1. **Receipt of the presentation by Adelina Urbanski, Commissioner of Community and Health Services, Cordelia Abankwa-Harris, Managing Director, Strategic Services Integration and Policy, Dr. Allan Maslove, Professor, Carleton University and Dr. Gene Swimmer, Professor, Carleton University.**

2. **Adoption of the recommendations contained in the following report dated September 2, 2010, from the Commissioner of Community and Health Services.**

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council approve in principle the draft study entitled, *Economic Analysis of Human Service Costs to 2031 - Recommendations for Enhancing Human Services Planning in the Regional Municipality of York* (*see Council Attachment 1*).

2. Regional Council request the Human Services Planning Board of York Region consider the results and recommendations of the *Economic Analysis of Human Service Costs to 2031 - Recommendations for Enhancing Human Services Planning in the Regional Municipality of York* in their future work.

3. Staff distribute copies of the *Economic Analysis of Human Service Costs to 2031 - Recommendations for Enhancing Human Services Planning in The Regional Municipality of York* to the local municipalities, York Catholic District School Board, York Region District School Board, Seneca College, Markham Stouffville Hospital, Southlake Regional Healthcare Centre, York Central Hospital, United Way of York Region and relevant federal and provincial departments and ministries for their consideration.

2. PURPOSE

This report presents the findings and recommendations of the draft study commissioned by the Region, entitled *Economic Analysis of Human Service Costs to 2031 -*

Recommendations for Enhancing Human Services Planning in The Regional Municipality of York as outlined in Council Attachment 1.

3. BACKGROUND

This study, prepared by Carleton University, was originally commissioned in 2007 by the Planning and Development Services Department to serve as an update to the economic analysis portion of the report *Changing Roles for Human Service Providers and an Economic Analysis of Human Service Costs* (prepared in 2000 as part of the Region's Human Services Strategy). The update was originally commissioned as part of the Region's Growth Management and Official Plan update process. Key deliverables requested included:

i) An update of previous expenditure forecasts and analyses for human services provided by both the Region as well as external providers/funders.
ii) The development of viable policy recommendations on human services planning. An information report respecting the study was presented to the Planning and Economic Development Committee on October 31, 2007 and approved by Regional Council on November 15, 2007 (Clause No. 5 of Report No. 9 of the Planning and Economic Development Committee).

In 2008, the completion of the study was placed on a temporary hiatus due to the transfer of the Human Services Planning function from the Planning and Development Services Department to the Community and Health Services Department. The study was recommenced in 2009 and at this time, a decision was made to undertake a minor re-scoping of the study as well as an update to include more current expenditure information.

Throughout the development of this study, the Region has consulted with external providers and the local municipalities to ensure the utilization of timely and relevant data. Carleton University presented the findings of the study to all stakeholders (internal and external) on June 21, 2010. Overall, the feedback received through both the review process and the presentation has been positive.

4. ANALYSIS AND OPTIONS

PURPOSE AND SCOPE OF STUDY

The study considers the future long term trends and fiscal pressures for human services in York Region

The primary purpose of this study was to get a high level indication of the future long term trends and challenges, including fiscal pressures that will be faced by the Region and the broader human services sector in the context of continuing rapid population growth, shifting demographic trends, an increasingly dynamic policy environment, and an urbanizing settlement structure.

This study can also serve as a tool to assist with advocacy efforts for more provincial and federal funding and as a means to redress funding inequities.

Expenditure forecasts to 2031 were generated for the core human services provided by the Regional Municipality and for a 'sampling' of services provided by external providers

The study provides a high-level forecast of future 'operating' expenditures to 2031 for human services provided by the Region as well as by a small sampling of external providers. Therefore, expenditures in the study represent only a portion of the total human service expenditure in York Region.

- Regional Municipal human services considered in this study include: Emergency Medical Services, Long Term Care and Seniors Community Programs, Public Health, Community Services, Housing, Police Services and Transit.

- External human services considered in this study include: local municipal culture, libraries and recreation; hospital-based healthcare; education provided by the two School Boards and Seneca College; and United Way of York Region community funding.

The methodology and assumptions used to forecast the future 'operating' expenditures provide important context when considering the numbers

The methodology used to generate the expenditure forecasts was kept simple in its approach given the high-level objectives of the exercise. Listed below are some key highlights and assumptions of the forecasting methodology:

- The study forecasts total 'operating' costs only and does not consider 'capital' costs. Therefore, the projections represent a conservative minimum level of future investment.
- The forecasts were generated using regression analysis. The first step involved looking back (8-12 years) at the historical relationship between population and 'operating' expenditures for a specific human service program area. The next step was to then plug in the 'projected' population for York Region to predict the corresponding future 'operating' expenditure. As such, the expenditure levels forecasted are a reflection of future projected population levels.
- The methodology implicitly makes several assumptions including that the average inflation rates, efficiency levels and service levels which occurred in the past several years will remain the same throughout the forecast period.

- The study incorporates the Transit forecasts that were generated as part of the York Region Transportation Master Plan update process and based on a ridership model. Given the different methodology used, the Transit numbers are considered in a stand-alone manner.

Overall, it is important to keep in mind that the cost projection exercise is limited to providing a high-level indication of what costs will look like if the expenditure levels/patterns of the past continue in the future. The forecasts do not consider changes in legislation, service standards, policy, public attitudes and behaviours. Changes in these variables can significantly change the forecasts.

EXPENDITURE FORECAST RESULTS

Operating Expenditure forecasts for Regional Municipal human services show the greatest increases for programs serving seniors as well as Transit

Provided in the table below is an aggregated summary of the 2031 forecasts of 'operating' expenditures for human service programs provided by The Regional Municipality of York. A detailed breakdown can be found on Page 44 of Council Attachment 1.

Table 1

Predicted 'Operating Expenditure'* Increases: 2006 to 2031
Human Services provided by The Regional Municipality of York

Program/Service Area	2006 Actual	2031 Projected	% Change
Long Term Care and Seniors Community Programs	$29.3 M	$118.8 M	305%
Emergency Medical Services	$32.1 M	$118.4 M	269%
Police	$171.1 M	$443.4 M	159%
Public Health	$45 M	$106.8 M	138%
Community Services & Housing	$187.5 M	$324.2 M	73%
Total	**$465 M**	**$1.11 B**	**139%**

Transit (projections generated internally using ridership model) – 2031 value excludes inflation	$98.8 M	$591 M	498%

*Values include operating expenditures only and do not incorporate capital costs

High-level trends for the human services provided by York Region reveal the following:

- Total human services expenditure growth (excluding Transit) is predicted to be greatest between 2006-2011 and 2011-2016 at about 25% (or a 4.5% annual increase), followed by 2016-2021 at 19% (3.5% annual rate). Growth in the five year intervals after 2021 (2021-2026 and 2026-2031) could be viewed as somewhat more moderate, being 11-15% over each period (or 2.1% to 2.8% annually, including inflation).
- When the above is considered in combination with the significant increases predicted for Transit expenditure in the next 10 years, the realities of the current economy, and the Provincial Government's restraint program, fiscal strains on the Region will be most significant over the next decade with the greatest increases occurring between now and 2016.
- In relative terms, the fastest growing sub-sectors will be Transit, Long Term Care and Seniors Community Programs and Emergency Medical Services.

Forecasts for external providers shows hospital–based healthcare outpacing all other areas

Provided in the table below is an aggregated summary of the 2031 forecasts of 'operating' expenditures for the human service program areas provided by external providers. A detailed breakdown can be found on Page 54 of Council Attachment 1.

Table 2
Predicted 'Operating Expenditure'* Increases: 2006 to 2031
Human Services Provided by External Providers

Stakeholder/Sector	2006 Actual	2031 Projected	% Change
Hospitals	$469.4 M	$2.54 B	441%
United Way of York Region	$4.4 M	$9.7 M	120%
Municipal Culture, Libraries, Recreation	$155.2 M	$345.8 M	123%
School Boards (Public & Catholic)	$1.31 B	$1.96 B	49%
Seneca College	$50.5 M	$66.3 M	31%
Total	**$1.99 B**	**$4.92 B**	**147%**

*Values include operating expenditures only and do not incorporate capital costs

High-level expenditure trends for the External Human Service Providers reveal the following:

- Expenditure within the hospital sector is expected to increase the most.
- The School Boards, along with Seneca College, are expected to experience more modest spending increases reflecting the more modest growth in school and college age children. However, it is noted that the forecasts for the School Boards do not account for the expenditure increases that will be associated with the full phase-in of full-time kindergarten.
- Expenditures for local municipal culture, libraries and recreations will more than double between 2006 and 2031.
- Donations earmarked for distribution/investment in York Region through United Way is forecasted to experience relatively strong growth to 2031.

The overall trend for external providers and the Regional Municipal programs is the same, with the highest expenditure increases occurring over the next decade and in particular between now and 2016, reflective of the higher near-term growth rate for the total population.

STUDY RECOMMENDATIONS

The study recommends that the Region consider a set of ‘four’ broad recommendations

Based on demographic trends, the human services policy environment and the findings of the expenditure forecastings, which by conservative estimates show significant expenditure increases over the next 20-25 years, the School of Public Policy and Administration at Carleton University has put forward four broad recommendations for consideration. While the recommendations were prepared for the Region they are applicable across the broader human services sector.

The growing and evolving human service needs of York Region can be best met through ‘Collaborative Planning’

1. Collaborative Planning: The first recommendation deals with pursuing opportunities for collaborative planning on various levels including between Branches/Departments at the Region, inter-governmentally, across the broader human service sector, and with citizens and communities. This is a direct response to the highly interrelated nature of human services with developments or changes in one area having impacts on another. Collaboration can facilitate a more holistic and integrated approach to planning ultimately leading to the provision of more effective and efficient human services. The recommendation also speaks to the need for the Region to serve as a leader and facilitator of collaborative efforts.

Investing early and strategically will be key to addressing growth pressures

2. Investing: Given that many human service areas will experience the highest growth pressures between now and 2016, it is recommended that the Region invest earlier rather than later to ensure the appropriate infrastructure/supports are in place to meet demand. To support this investment strategy, it is recommended that the Region:

- Increase advocacy efforts aimed at the provincial and federal governments to secure improved funding levels.
- Continue to increase financial and non-financial supports to community agencies and the non-profit sector to enhance their capacity to respond.

Alternative service delivery, enhancing access to services, focusing on prevention, and capitalizing on opportunities presented through urban intensification can serve as key strategies for improving the 'Management and Delivery' of services

3. Managing and Delivering (Services): The third recommendation focuses on ways to enhance the management and delivery of services and includes the following four interrelated approaches:

- Given that growth, and therefore costs, will be highest in the next few years, it is suggested that in addition to budgeting for more staff, York Region also partner, where appropriate, more with the voluntary, non-profit and private sectors to deliver services.
- Continue to look for opportunities to offer more convenient and integrated single-window access to services and information about services – both physical locations and virtual access.
- Enhance investment on prevention strategies and approaches given the mounting evidence around not only the social but economic benefits as well.
- Continue to explore the potential impacts of urban intensification on human services management and delivery in order to maximize the benefits while mitigating the challenges.

An enhanced focus on the collection, analysis and sharing of meaningful and current data can serve to improve the responsiveness of human services

4. Importance of Data Monitoring and Evaluation: The fourth recommendation suggests a continued and enhanced focus on data monitoring and evaluation to support informed evidenced-based policy and program decisions. This strategy includes the development of mechanisms for regularly collecting and sharing relevant and timely data across sectors to improve program effectiveness. Identifying ways to measure the quality of programs and services is also recommended.

Next steps involve sharing the study broadly and requesting that the Human Services Planning Board of York Region consider it in their work

It is proposed that the study be shared broadly both internally at the Region and externally with the broader human services sector. While the report recommendations are directed at the Region they have broad applicability and may help to inform the strategic planning efforts of external stakeholders.

It is also being suggested that Regional Council request that the new Human Services Planning Board of York Region (HSPB-YR) consider the results and recommendations in their future planning and work. The study recommendations align with the Board's vision: A healthy vibrant community enhanced through inclusive, collaborative and innovative human services. The HSPB-YR Co-Chairs have reviewed the study and agree that it can serve as a valuable tool.

Relationship to Vision 2026

This study will serve as a tool and resource to help achieve the vision of healthy communities and associated goals and policies as set out in Vision 2026 as well as the York Region Sustainability Strategy and the York Region Official Plan.

The findings of this study also dovetail with the directions set out in the Community and Health Services Multi-Year Plan. This study focuses on the broader longer term trends that align with and support the proposed directions in the Multi-Year Plan.

5. FINANCIAL IMPLICATIONS

This study was completed within the approved operating budget of the Community and Health Services Department.

The projected financial costs in the study were generated for high-level planning purposes only and are not meant for budgetary considerations.

6. LOCAL MUNICIPAL IMPACT

Local Municipalities and other external human service providers and funders are key partners in the provision of human services. This document can help inform future planning to meet the growing and changing needs of their communities.

7. CONCLUSION

The findings and recommendations within the Economic Analysis reinforce the need to change our thinking and behaviour about how we plan and deliver human services. While the Region has work underway in many of the recommended areas, this study will serve as a catalyst for ongoing dialogue and analysis about how the Region and the broader human services sector can continue to move forward in a more strategic and integrated manner given the complexity of the issues.

The human service expenditure forecasts in this study also underpin the need for continued and enhanced fiscal support from senior levels of government. This reality is reinforced when considering that the forecasts represent a very conservative minimum level of investment and does not factor in the increased expenditure required to address the ever widening service level/funding gaps.

The development of the study, which relied on a significant amount of historical financial data and input from a multitude of organizations, was only made possible due to the contributions, expertise and cooperation of the stakeholders considered in the study. This study was a true collaborative effort by many stakeholders across this Region and is a demonstration of the benefits of the broader human services sector working together.

For more information on this report, please contact Cordelia Abankwa-Harris, Managing Director, Strategic Service Integration and Policy, Ext. 2150.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)

Council Attachment 1

Economic Analysis of Human Service Costs to 2031

Recommendations for Enhancing Human Services Planning in The Regional Municipality of York

Centre for Policy and Program Assessment
School of Public Policy and Administration

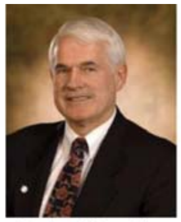
Carleton University

DRAFT – September 15, 2010

Photos: Artist renderings of proposed urban intensification of a street in Vaughan

Mayor
Frank Scarpitti
Town of Markham

Regional Councillor
Jack Heath
Town of Markham



Regional Councillor
Jim Jones
Town of Markham

Regional Councillor
Gordon Landon
Town of Markham

Regional Councillor
Joseph Virgilio
Town of Markham

Mayor
David Barrow
Town of Richmond Hill

Mayor
Linda D. Jackson
City of Vaughan

Chairman & CEO
Bill Fisch

Regional Councillor
Brenda Hogg
Town of Richmond Hill

Message from Regional Council

This study, the *Economic Analysis of Human Service Costs to 2031 - Recommendations for Enhancing Human Services Planning in The Regional Municipality of York*, provides high-level insight into the economic implications of demographic developments on The Regional Municipality of York and specifically on the broader human services sector. It also identifies potential strategies for moving forward.

Responding to the human service needs of our residents is critical to sustaining our healthy, vibrant communities. York Region's long-term strategic planning documents, including Vision 2026, the Sustainability Strategy and the updated Regional Official Plan, support this overarching strategy. This year, York Regional Council established the Human Services Planning Board of York Region to lead initiatives to help ensure the provision of quality human services that support the expanding needs of our residents.

Over the next two decades, York Region will experience continued rapid growth and become even more culturally diverse. At the same time, our land use planning calls for less urban sprawl and more intensified housing development. Building sustainable communities requires dialogue to better understand the emerging issues and opportunities associated with these trends.

The Region will use this document to promote discussion and further analysis among the broader human services sector and different levels of government. We hope the entire human service sector will use this study to inform their strategic planning efforts. The aim is to foster the development of a holistic, strategic approach to meeting the changing needs of our residents and communities.

Regional Councillor
Joyce Frustaglio
City of Vaughan

Regional Councillor
Vito Spatafora
Town of Richmond Hill

Regional Councillor
Mario Ferri
City of Vaughan

Mayor
Tony Van Bynen
Town of Newmarket

Regional Councillor
Gino Rosati
City of Vaughan

Regional Councillor
John Taylor
Town of Newmarket

Mayor
Robert Grossi
Town of Georgina

Regional Councillor
Danny Wheeler
Town of Georgina

Mayor
Phyllis M. Morris
Town of Aurora

Mayor
Wayne Emmerson
Town of Whitchurch-Stouffville

Mayor
James Young
Town of East Gwillimbury

Mayor
Margaret Black
Township of King

Message from the Co-Chairs of the Human Services Planning Board of York Region to be inserted here.

Table of Contents

Executive Summary

Introduction

This report provides a set of recommendations and strategies for enhancing human services planning within York Region. The recommendations were informed by various processes including an economic analysis of future human service costs. While the recommendations and strategies are directed primarily at The Regional Municipality of York (York Region) as a corporation, many are applicable across the broader human services sector. This report was commissioned by York Region as part of its ongoing growth management strategy and provides an update to a portion of an analysis prepared in 2000 (Changing Roles for Human Service Providers and an Economic Analysis of Human Service Costs).

Human services include programs and services that support a safe, caring and healthy community and maintain and promote a high quality of life

York Region recognizes the value of human services and human services planning in supporting the quality of life of residents. This is reflected clearly in its long term strategic planning documents: Vision 2026, the York Region Sustainability Strategy and the Regional Official Plan. While human services cover a broad spectrum, the areas considered specifically in this report include programs provided by York Region (i.e. Emergency Medical Services, Long Term Care and Seniors Community Programs, Public Health, Community Services, Housing, Police Services and Transit) as well as services related to hospital-based healthcare, education, local municipal culture, libraries and recreation programs, and other community and social services that are funded by United Way of York Region.

Planning for human services is critical within a fast growing and diverse region

Situated within the Greater Toronto Area, York Region has experienced rapid population growth for several years. Adding over 163,000 new residents in the five year period between 2001 and 2006, York Region was the single fastest growing census division in Ontario and the third fastest in Canada. This trend of rapid growth is expected to continue well into the future. With a current

Key Points about this Study:

- The purpose of the study is to get a high-level indication of the challenges, including fiscal pressures, facing York Region and the broader human services sector over the next couple of decades.
- This study is not intended to be a long term financial planning strategy.
- The study looks at human services provided by York Region and a small ‘sampling’ of services provided by external partners. Therefore, it considers only a portion of total human service expenditure in the region.
- The Expenditure Forecasts to 2031 consider ‘Total Operating Expenditures’ only and not ‘Capital Costs’. Therefore, it represents a conservative minimum level of investment.
- The Expenditure Forecasts are based on a simple methodology that predicts future expenditure trends based on the past relationship between expenditure and population levels.
- The Expenditure Forecasts assume the continuation of past inflation rates and service levels.
- Bottom Line: This document is meant to provide high-level insight into likely challenges ahead and proposes potential strategies to address the issues. More importantly, its aim is to promote discussions within and across human service sectors about how to develop a more holistic and broad strategic approach to responding to the growing and changing human service needs of York Region’s residents and communities.

population of approximately 1.04 million people (April 2010), York Region is projected to surpass 1.5 million people by 2031. Along with rapid growth, York Region is also continuing to experience significant shifts in its demographic make-up including: increasing ethno-cultural, visible minority and linguistic diversity, a rapidly growing seniors population, and an increasing low income population. York Region's settlement structure will also undergo significant evolution through planned intensification and adopting a city building model within its regional centres and corridors. Combined, these elements present significant implications for the human services sector and show the need to plan strategically and collaboratively.

Increasing demand and changing human service needs combined with the persistence of historic under-funding is placing significant pressure on the human services sector

Growth and demographic shift continues to fuel significant increases in the demand for existing and new human services. Like many other high growth areas in southern Ontario, York Region continues to receive significantly less funding per capita from the province in the areas of healthcare and social services. This is threatening the capacity of the human services sector to keep pace with the increasing and changing needs of York Region's residents.

The policy recommendations and strategies proposed in this report were informed by three key processes:

i. A review of York Region's changing demographic landscape and the potential opportunities and challenges of increasing urban intensification.

ii. A look at the policy context for human services in York Region which involved consultations with key service providers and funders within the broader human services sector.

iii. A high level forecast of future operating expenditures for human service programs provided by York Region (i.e. Emergency Medical Services, Long Term Care and Seniors Community Programs, Public Health, Community Services, Housing, Police Services and Transit) and for services related to hospital-based healthcare, education, local municipal culture, libraries and recreation programs, and other community and social services that are funded by United Way of York Region. It is noted that this report only considers operating expenditures and does not look at capital costs.

York Region's human services sector will face a variety of key demographic changes along with more concentrated development

York Region is projected to add, on average, over 23,000 residents annually between 2006 and 2031 with the growth rate to be more rapid between now and 2021. It is anticipated that a significant portion of this growth will continue to be driven by immigration. While York

Region is projected to experience growth in all age groups between 2006 to 2031, the annual growth rate for those aged 65 and over is more than 2.5 times the growth rate of the total population. And despite having a median economic family income higher than Ontario and Canada, York Region is experiencing an increase in the number of low income households, as well as continuing housing affordability issues.

A large proportion of the growth in York Region will be accommodated through urban intensification and emerging city centres. While population density will affect the demand for human services in York Region, its impact is difficult to measure. Depending on the specific service, intensification is likely to present potential challenges (e.g. higher land costs) as well as opportunities (e.g. efficiency, improved access).

York Region's human services sector is subject to a variety of external influences and variables

The report considers key variables and trends impacting the human services sector in York Region which were informed by consulting with key providers and funders of human services in York Region. The objective was to gain insight into the policy environment, demand pressures (current and future), challenges, etc. that face human service providers. Areas and trends perceived to be particularly significant include changes related to growth and changing demographics, funding, legislative changes and policies directed towards service integration and delivery, performance monitoring and increased citizen and community engagement.

Expenditure forecasts were used to gather a high-level indication of future human service cost trends and pressures in York Region

The human services sector operates in a highly dynamic policy, economic and social environment that can change and does rapidly. In this regard, predicting future human services costs 20 to 25 years into the future is not a simple exercise and is subject to change. However, there is benefit in trying to get a high-level indication of future long term expenditure trends and pressures that will be faced by York Region and the broader human services sector. It allows for the early identification of future priority areas and supports a proactive and preventative approach that can enhance flexibility and capacity for responding to human service needs.

The time period of 2006 to 2031 was used because it aligns with the growth planning timeframe used in the Regional Official Plan. Expenditure forecasts were generated for each five year interval period contained in York Region's population projections to 2031 (i.e., 2011, 2016, 2021, 2026 and 2031).

Expenditure forecasting methodology was kept simple in its approach given the high-level objectives of the report

Forecasting operating expenditures was done through a statistical analysis technique known as regression analysis. The regression analysis methodology used was kept simple given the high-level objectives of the forecast. Projected population growth (for either the total population or a specific age cohort, depending on the specific program being considered) was the single independent variable used. Therefore, the expenditure levels forecasted are a reflection of future projected population levels. One notable exception is the transit expenditure projections which were generated as part of the York Region Transportation Master Plan update process and based on a ridership model.

High-level expenditure forecasting of this nature implicitly makes several assumptions

Operating expenditures are impacted by many factors, so attempting to consider numerous variables is beyond the scope and purpose of this report. In this regard, the report makes several assumptions, central among them are that the average inflation rates, efficiency levels and service levels which occurred in the past several years will continue throughout the forecast period. The transit projections, which as noted above were generated by York Region through a different methodology, are an exception. They do factor in rising service levels given the significant planned expansion of the transit network in York Region, but do not incorporate inflation.

The report, however, does consider the impacts that higher and lower than predicted population growth and inflation rates would have on expenditure levels. This is accomplished through a sensitivity analysis exercise and serves to provide insight into the potential cost implications of the population growing at a slower or faster rate than projected and of future inflation levels deviating higher or lower than the past historical average.

Some of the high-level trends revealed through the expenditure forecasting analysis of human service operating expenditures include the following:

<u>Human Services Provided by York Region:</u>

- Total operating expenditures (including inflation) for York Region's human service programs and services considered in this report (excluding transit) are predicted to more than double between 2006 and 2031 – increasing from $465 million in 2006 to approximately $726 million in 2016 and to approximately $1.11 billion by 2031.
- Total operating expenditures (excluding transit) are expected to grow most quickly between 2006 and 2016, increasing by about 4.5% annually.
- Transit operating expenditures (excluding inflation) are predicted to increase nearly six fold, from $99 million in 2006 to $591 million in 2031. Expenditures are expected to grow most quickly between 2006 and 2021, increasing by 9.2% annually.
- In relative terms, the fastest growing sub-sectors will be Transit, Long Term Care and Seniors Community Programs, and Emergency Medical Services.

Human Services provided by external providers:

- Expenditures within the hospital sector are expected to increase more than five fold growing from approximately $469 million in 2006 to more than $2.5 billion in 2031. It is important to note that for the hospital sector, expenditure forecasts were based on the 60 years and older age cohort, rather than the entire population, to reflect the correlation between aging and increased demand for healthcare services and the rapidly growing seniors population in York Region.
- Primary and secondary schools are expected to experience more modest spending increases from $1.31 billion in 2006 to $1.96 billion in 2031 reflecting the more modest growth in school age children over the same timeframe. However, it is important to note that the forecasts for the school boards do not account for the expenditure increases that will be associated with the phase-in of full time kindergarten.
- Local municipal culture, libraries and recreation will more than double between 2006 and 2031 increasing from approximately $155 million to over $346 million with the highest expenditure increases occurring between now and 2016, reflective of the higher near-term growth rate for the total population.

Combined Expenditure (York Region and external providers):

- Combined expenditures on the human services covered in this report provided directly by York Region (excluding transit) and external providers are estimated to increase from $2.46 billion in 2006 to $3.90 billion in 2016 (equivalent to an average annual growth rate of 4.7%). By 2031, these expenditures are projected to reach $6.03 billion, representing an annual growth rate of about 3% between 2016 and 2031.

Recommendations:

Based on the review of demographic trends, the human services policy environment and the expenditure forecasts, four broad sets of recommendations are proposed with respect to enhancing the responsiveness of human services as well as managing the associated future costs:

1. Collaborative Planning – York Region should continue to develop comprehensive, integrated planning for human services within the region. Planning should also be informed by the policies and programs of federal and provincial governments. Planning should be coordinated with other service providers in the region, and should engage citizens and communities. The first iteration of the Community and Health Services Department's Multi-Year Plan is a positive step with great potential to evolve further. As well, the Human Services Planning Board of York Region

(HSPB-YR) has the best potential for cost effective, concentrated, cross-sectoral planning and engagement.

2. Investing – Given that total population growth rates will be higher in the near-term (from now to 2021) there is a need to invest in human services infrastructure earlier rather than later in the projection period. York Region should work to encourage more predictability from the provincial and federal governments with regard to funding. There is a need to invest in institutional and human capital to build capacity within the human services sector.

3. Managing and delivering – York Region and the broader human services sector should actively pursue alternative service models, explore opportunities for service integration, and where possible preventative investments should be undertaken. York Region should also continue to explore and analyze the opportunities and challenges that intensification may bring to human services provision.

4. Data monitoring and evaluation – Recognizing that major strides have been made in the last decade in the area of data monitoring and analysis in York Region (as evidenced by the demographic data and projections), this report notes that priority should be placed on enhanced data collection both by York Region and its partner agencies (and where beneficial and feasible, the sharing of data) to support informed, evidenced-based decisions and to provide greater transparency and awareness of human service costs in York Region. Data monitoring and evaluation should also be a priority in the area of service delivery to enhance effectiveness and efficiency.

Overall, it is hoped that this report can inform future human services planning in York Region. Given the high-level nature of the recommendations and strategies, the report should be viewed as a starting point for further planning around ways to improve the responsiveness of human services at the same time as managing and anticipating costs.

1. Introduction

This chapter highlights the purpose of this study and provides an outline of this report.

1.1 Services for a Growing, Changing Population

The Regional Municipality of York (York Region), part of the Greater Toronto Area (GTA) and the inner ring of the Golden Horseshoe, along with other community partners, provides a range of human services to a growing population. Between the years 2001-2006, York Region experienced the highest growth rate in Ontario and the third highest in Canada. The region is expecting a significant increase from its current 1.04 million residents (April 2010) to 1.5 million residents by 2031.[1]

The face of the region is changing too. In 2006, approximately 43% of the population identified themselves as immigrants (Ontario average is 28%).[2] The number of immigrants living in York Region between 2001 and 2006 grew by 34%—the highest growth rate in the GTA. Languages spoken in the region continue to diversify with the top non-official languages including Chinese languages, Italian, Russian, Persian and Tamil. In addition, the number of people who speak a non-official language at home has increased by 152% since 2001.[3]

The region is also seeing changes in the family form, age, and income of its residents. York Region has the highest proportion of married couples in the GTA with 67% of those married couples having children, in comparison to 46% for Canada.[4] At the same time, the number of lone parent families grew by 37% from 2001 to 2006. York Region had the highest growth (14%) between 2001 and 2006 for children (age 14 years and under) in Ontario. While the region, compared to the Greater Toronto Area and Canada is "relatively young", estimates suggest that by 2031 York Region's senior population will have increased more than three times over 2006 levels to 21% of the total population. The number of low income residents increased substantially between 2001 and 2006.

> In York Region by 2031, it is estimated that there will be:
>
> - 1.5 million people
> - More than 3 times as many people over 65 as today[5]

---

[1] Regional Municipality of York, Web site and interviews, 2007 data: www.york.ca/Departments/Community+Services+and+Housing/reports.htm

[2] Regional Municipality of York, Web site (2006 Census) http://www.york.ca/About+Us/York+Region+Facts/default+York+Region+Facts.htm

[3] Regional Municipality of York, "Community Social Data Strategy Update," Community Services and Housing Committee, February 2008.

[4] Regional Municipality of York, Web site (2006 Census) http://www.york.ca/About+Us/York+Region+Facts/default+York+Region+Facts.htm; Regional Municipality of York, "Community Social Data Strategy Update," Community Services and Housing Committee, February 2008.

[5] Regional Municipality of York, Web site (2006 Census) http://www.york.ca/About+Us/York+Region+Facts/default+York+Region+Facts.htm; Regional Municipality of York, "Community Social Data Strategy Update," Community Services and Housing Committee, February 2008.

This growing and increasingly diverse community has created both challenges and opportunities for delivering human services in York Region. For example, York Region has recognized that it will need to prioritize, among other things, how to:

- create and retain a variety of employment opportunities;
- provide resources for newcomers to overcome barriers;
- provide adequate social and affordable housing options[6];
- develop a robust and sophisticated transit system; and,
- protect and restore York Region's natural heritage system.

All of this requires a strategic and collective response to planning and implementing human services in York Region.

1.2 Planning for the Future

York Region recognizes the value of human services and human services planning in supporting the quality of life of residents. This is reflected clearly in its long term strategic planning documents: Vision 2026, the York Region Sustainability Strategy and the newly updated Official Plan. Vision 2026, York Region's overarching long term strategic plan represents York Region's "commitment to forging a legacy of sustainability that is based on a sustainable natural environment, healthy communities and economic vitality." The Sustainability Strategy is serving as a tool to help achieve this legacy by establishing a model for municipal decision making that integrates and applies principles of sustainable natural environment, healthy communities and economic vitality. The Region has also just completed an extensive growth management planning exercise which culminated in the December 2009 Council adoption of a new Regional Official Plan, supported by a variety of studies and infrastructure master plans. A primary catalyst of the growth management exercise is the legislative requirement to bring the Region's official plan into conformity with the Provincial Growth Plan for the Greater Golden Horseshoe (2006). A principal focus of all of these documents is creating healthy communities and responding to the needs of York Region's residents in an effective and efficient manner.

This report will serve as a tool and resource to help achieve the vision of healthy communities and associated goals and policies as set out in Vision 2026, the York Region Sustainability Strategy and the York Region Official Plan.

1.3 Scope of this Study

This study proposes a set of recommendations and strategies for enhancing human services planning in York Region. The policy recommendations are informed by three key processes:

[6] Regional Municipality of York, Economic Analysis of Human Service Expenditures, Terms of Reference

i. A review of York Region's changing demographic landscape and the potential opportunities and challenges for the human services sector of increasing urban intensification.
ii. A look at the policy context for human services in York Region which involved consultations with key service providers and funders within the human services sector.
iii. A high level forecast of future operating expenditures for human service programs provided by York Region (i.e. Emergency Medical Services, Long Term Care and Seniors Community Programs, Public Health, Community Services, Housing, Police Services and Transit) as well as for services related to hospital-based healthcare, education, local municipal culture, libraries and recreation programs, and other community and social services that are funded by United Way of York Region.

   While recognizing that sources of funds can affect expenditures, the analysis does not examine the revenue side of budgets. In particular, the compositions of the Region's and municipal budgets (that is, the shares generated by property taxes, user charges, and provincial and federal grants) are not examined. Similarly, the analysis does not delve into the revenues of hospitals, educational institutions, and other organizations providing human services. Essentially, the statistical analysis examines the demographic-related factors in human service expenditure growth to 2031.

This analysis updates portions of a larger study conducted by Carleton University's Centre for Policy and Program Assessment in 2000.

1.4 Overview of the Report

The overall layout of the report is as follows:

- **Chapter 2**: Considers York Region's population growth projections to 2031 (which are used-in the expenditure forecasting) along with the Regional demographic profile and trends. Potential challenges and opportunities facing the human services sector from planned urban intensification are also briefly discussed. This chapter was provided by York Region (except for the concluding section on "Urban Intensification").
- **Chapter 3**: Provides some context on the policy environment affecting the human services sector in York Region.
- **Chapter 4**: Describes the methodology used for the expenditure forecasting in Chapter 5, including the statistical model, data collection methods and assumptions and limitations.

- **Chapter 5**: Examines the key findings of the operating expenditure forecasts and a sensitivity analysis exercise looking at the impacts of higher and lower than projected population growth and inflation rates.
- **Chapter 6**: Provides a set of high-level recommendations and strategies for enhancing human services planning in York Region along with a brief discussion of emerging issues and uncertainties.

Appendices of this report provide: a) a detailed explanation of the regression analysis methodology used to forecast expenditures; b) a schedule of the specific population age cohorts used in the expenditure forecasts for each human service program/stakeholder; and c) acknowledgement of the individuals who contributed to this study.

2. Demographics and Urban Intensification

With the exception of the last section (Urban Intensification), this chapter was written by staff of The Regional Municipality of York.

2.1 Introduction

With a current population of approximately 1.04 million people, York Region is projected to surpass 1.5 million people by 2031. Along with rapid growth, York Region is also continuing to experience significant shifts in its demographic make-up including: increasing ethno-cultural, visible minority and linguistic diversity, a rapidly growing seniors population, and an increasing low income population. York Region's settlement structure will also undergo significant evolution through planned intensification and adopting a city building model within its regional centres and corridors. Combined, these elements present significant implications for the human services sector and show the need to plan strategically and collaboratively.

The purpose of this chapter is three-fold:

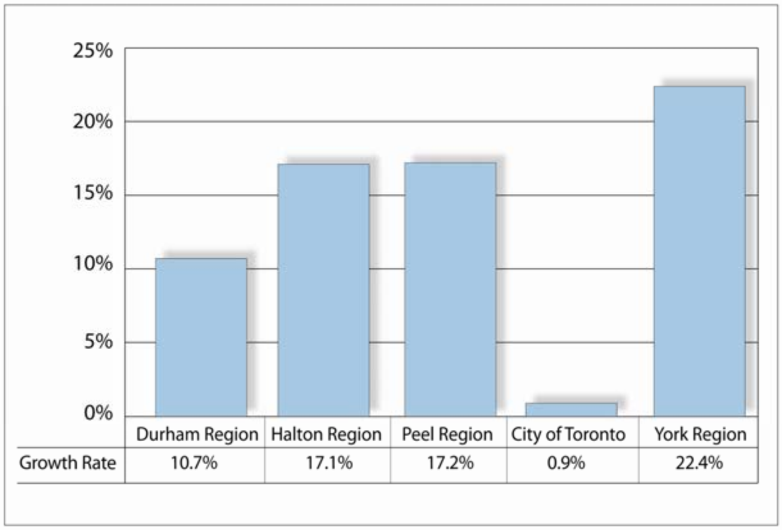
- To provide an overview of the Regional Council approved demographic growth projections which are being used to generate the expenditure projections;
- To provide insight into the increasing diversity of York Region's population and rapidly evolving human service needs; and,
- To consider the potential challenges and opportunities created by increased urban intensification as York Region grows.

2.2 Projected Population Growth

Between 2001 and 2006, York Region's population increased by 163,458 people – from 729,254 to 892,712[7]. This 22.4% increase made York Region the single fastest growing census division in Ontario and the third fastest in Canada. Figure 2.1 shows York Region's growth compared to the balance of the GTA[8].

[7] Statistics Canada. 2006 Census. Please note that the 2006 population numbers used by York Region in its population forecasts (Table 2.1 below) adjust the figures upward to factor in the Census undercount and rounding. While the official 2006 Census population for York Region is 892,712, the Statistics Canada undercount adjusted figure for York Region is 931,874.
[8] Statistics Canada. 2006 Community Profiles of the respective municipalities.

Figure 2.1: GTA Municipal Growth Rates, 2001 to 2006, Census 2006, Statistics Canada[9]



This rapid growth trend is expected to continue. Between 2006 and 2031[10] York Region's population is projected to grow by 62%, surpassing 1.5 million people by 2031. The most significant growth driver is the rapidly expanding immigrant population[11]. The foreign-born population living in York Region increased by 34% between 2001 and 2006 while for the same period, the non-immigrant population grew 15%[12]. Employment within York Region is also projected to increase significantly, from an estimated 462,300 jobs in 2006 to 780,300 jobs in 2031[13].

The following table represents York Region's official population and employment forecasts out to 2031 by each of the nine lower tier municipalities. They are the Regional Council-approved forecasts that will serve to guide growth management throughout the region.

[9] Statistics Canada. 2006 Community Profiles of the respective municipalities.
[10] York Region Official Plan – December 2009, Table 1 (York Region Population and Employment Forecast by Local Municipality),
[11] Federation of Canadian Municipalities. Quality of Life in Canadian Communities, Theme Report #5: Immigration and Diversity in Canadian Cities & Communities. Published March 2009.
[12] Federation of Canadian Municipalities. Quality of Life in Canadian Communities, Theme Report #5: Immigration and Diversity in Canadian Cities & Communities. Published March 2009.
[13] Table 1 (York Region Population and Employment Forecast by Local Municipality),York Region Official Plan – December 2009

Table 2.1: York Region Population and Employment Forecasts by Local Municipality[14]

	2006	2011	2016	2021	2026	2031
Aurora						
Population	49,700	57,300	63,700	68,200	69,700	70,400
Employment	20,300	24,200	29,000	32,400	33,500	34,200
East Gwillimbury						
Population	22,000	26,300	34,700	48,300	66,800	88,000
Employment	5,900	7,100	11,600	18,700	26,500	34,400
Georgina						
Population	44,600	48,700	52,800	58,000	64,100	70,700
Employment	8,000	9,000	11,000	13,900	17,300	21,200
King						
Population	20,300	23,400	27,000	29,900	32,600	35,100
Employment	7,100	7,800	9,700	11,000	11,500	11,900
Markham						
Population	273,000	303,500	337,800	370,500	399,100	423,500
Employment	144,800	170,500	200,300	221,500	231,300	240,600
Newmarket						
Population	77,600	84,000	88,700	91,900	94,600	97,300
Employment	42,100	45,400	47,600	48,700	49,100	49,400
Richmond Hill						
Population	169,800	195,000	216,900	231,500	239,400	242,800
Employment	61,100	72,600	86,100	94,300	97,400	99,400
Vaughan						
Population	249,300	294,200	329,100	360,600	389,700	418,800
Employment	162,200	193,700	226,000	248,900	257,600	266,100
Whitchurch-Stouffville						
Population	25,500	38,700	49,400	55,800	59,200	60,800
Employment	10,900	14,200	19,200	22,000	22,700	23,000
York Region						
Population	931,900	1,071,100	1,200,100	1,314,700	1,415,200	1,507,500
Employment	462,300	544,600	640,500	711,300	746,900	780,300

Note: Figures may not add up due to rounding.

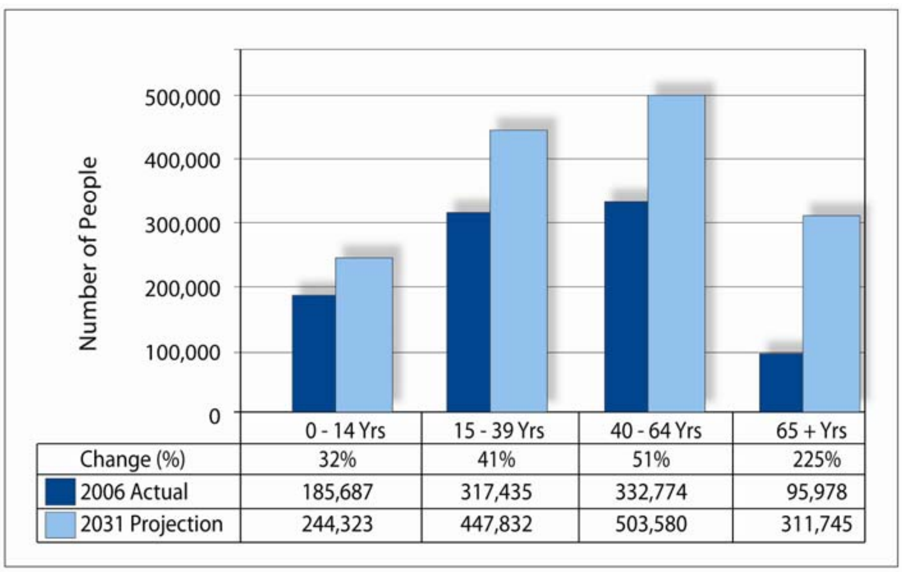
[14] York Region Planning & Development Services Department. Please note that at the time of the finalization of this report it was anticipated that the above projections would be adjusted slightly in response to a request by the province as part of their review and approval process of the Regional Council adopted York Region Official Plan. The request was to bring the 2031 Population to 1,500,000 people even and the 2031 Employment forecast to 780,000 jobs even. Given the minor nature of the change and that the expenditure forecasts in Chapter 5 are based on the above, the updated projections were not incorporated into this report.

Population Forecasts by Age Group

York Region's official population forecasts are also broken down by five year age groups (e.g., 0-5 years, 6-10 years, etc.). It is these forecasts that have been used to generate the human services expenditure projections out to 2031 for the various human services stakeholders/programs considered in this report.

The chart below combines the five year age groups into four broader age intervals and shows the projected growth within each age interval between 2006 and 2031. As can be seen, it is projected that York Region will see significant growth among all age groups. While growth of the working age population will be significant, the most dramatic increase will occur among the seniors cohort (65+ years) which will more than triple in size.

Figure 2.2: Change between 2006 Actual & 2031 Projected Population by Age Intervals[15]



The growth in the seniors population will be driven in large part by the "baby boomer" cohort (those born between 1945-1965[16]). This cohort represents the largest share of York Region's population and will be fully transitioning into retirement over the next couple decades. As a proportionate share of the total population, children and the younger population are projected to decline over the next 20-25 years as shown in Table 2.2 below. In light of the above, the *median* age of York Region's population will increase from 37.5 years in 2006 to approximately 42.5 years in 2031[17].

[15] Data represents percent projected population change, by age, from 2006 to 2031. Source data based on population projections developed by the York Region Planning and Development Services Department.
[16] Statistics Canada. Shifts in the Population Size of Various Age Groups. Accessed from http://www12.statcan.ca/english/census01/products/analytic/companion/age/population.cfm on Aug. 1, 2009.
[17] The 2006 median age is sourced from Statistics Canada (2006 Community Profile for York Region) while the 2031 median age was calculated using the York Region population forecasts by age group produced by the York Region Planning and Development Services Department.

Table 2.2: Percentage Composition of Each Age Cohort by Year, in 2006 & 2031[18]

Age Cohort (From Above Graph)	2006	2031
0-14 Years	19.9%	16.2%
15-39 Years	34.1%	29.7%
40-64 Years	35.7%	33.4%
65+ Years	10.3%	20.7%

2.3 Household and Family Composition

In 2006, there were 275,680 households in York Region of which:

- 80% were one-family households consisting of a single family living in a household (e.g. married couple with children). York Region had the highest proportion of one family households in the GTA. [19]
- 14% were non-family households consisting of a person living alone, or two or more people who share a dwelling but do not constitute a family. This was the lowest proportion in the GTA. [20]
- 5% were multiple family households consisting of two or more families occupying the same dwelling which was the second highest proportion in the GTA after Peel Region.[21]

Other notable characteristics from the 2006 Census include the following:

- Of the married couples in York Region, 67% had children – this was the largest proportion in Canada.[22]
- Between 2001 and 2006 there was a 37% increase in lone-parent families, the majority of which were led by women. [23]

---

[18] Source data based on York Region population projections, and each year's age group has been expressed as a percentage of total annum population.
[19] York Region Community Social Data Consortium. Just the Facts About Your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
[20] York Region Community Social Data Consortium. Just the Facts About Your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
[21] York Region Community Social Data Consortium. Just the Facts About Your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
[22] York Region Fact Sheet: What if York Region Were a Village of Just 100 People?
[23] York Region Fact Sheet: What if York Region Were a Village of Just 100 People?

2.4 Diversity: Ethnic Origin and Visible Minorities

York Region residents represent a diverse collection of ethnicities with the 2006 Census showing a total of 204 ethnic groups. The top five ethnic origins within York Region in 2006 were Chinese (21%), Italian (19%), East Indian (8%), Canadian (7%) and English (5%)[24]. Diversity is further illustrated when looking at visible minority statistics. As illustrated in Table 2.3, a large and growing proportion of York Region's population are visible minorities. The vast majority of the visible minority population in York Region is of Chinese and South Asian descent with the fastest growing visible minorities being people of West Asian, Southeast Asian and Korean origin, respectively.

Table 2.3: Visible Minorities in York Region, 2001 to 2006[25]

	2001	2006	Percent Change from 2001 to 2006
Total Visible Minority Population	216,130	329,955	**53%**
Arab	4,935	7,400	**50%**
Black	16,150	20,770	**29%**
Chinese	100,710	138,575	**38%**
Filipino	10,370	17,150	**65%**
Japanese	1,905	2,360	**24%**
Korean	5,900	10,860	**84%**
Latin American	4,720	8,560	**81%**
Multiple visible minority	4,450	9,015	**103%**
South Asian	47,345	80,595	**70%**
Southeast Asian	5,175	10,110	**95%**
Other Visible Minorities	5,910	3,700	**-37%**
West Asian	8,550	20,860	**144%**

According to the 2006 Census, 72% of recent immigrants and 71% of all immigrants living in York Region are visible minorities[26].

2.5 Newcomer/Immigrant Population

In 2001, there were 43,405 recent immigrants (those who immigrated between 1996-2001) in York Region, compared to 46,460 in 2006 (those who immigrated between 2001-2006); this represents a 7% increase[27]. The majority of York Region's recent immigrants (arriving

[24] York Region Community Social Data Consortium. Just the Facts About Your Community: Ethnic Origin and Visible Minorities. November 2008.
[25] York Region Community Social Data Consortium. Just the Facts: About Your Community: Ethnic Origin and Visible Minorities. Published November 2008, based on 2006 Census.
[26] Statistics Canada, 2006 Census.
[27] York Region Community Social Data Consortium. Just the Facts About Your Community: Diversity of Residents Living in York Region: Immigration and Mobility. Published November 2008, based on 2006 Census Data. .

between 2001 to 2006) are currently coming from Eastern Asia (27%), and West and Central Asia and the Middle East (17%)[28].

2.6 Language

Knowledge of Official Languages

The 2006 Census shows that most people in York Region speak English (89%). However, a fairly large number of residents (4%) have no knowledge of at least one official language compared to approximately 2% for Ontario and Canada[29]. There has been a significant increase in York Region residents that do not have knowledge of either official language, increasing by 50% between 2001 and 2006[30]. There are some neighbourhoods in the Town of Markham where up to 25% of the population had no knowledge of English or French[31].

Knowledge of an official language can have a large impact on integration, accessibility and employment potential[32]. Statistics Canada concluded in a report analyzing language knowledge, language of occupation and immigration that "[…] holding other characteristics such as ability to speak in English or French, education and age equal, it seems that most immigrants who work in non-official languages are at a disadvantage with respect to other workers. They have higher rates of unemployment, are in occupations usually requiring less formal training, earn less and are more often in low-income households. They also have less opportunity to bring their educational qualifications and other skills to bear." [33]

Knowledge of Foreign Languages

Among the residents that speak other languages, the most common languages spoken at home were Chinese, Italian, Russian, Persian (specifically Farsi), and Tamil, respectively in 2006. The Towns of Aurora (133%), Georgina (99%), and Newmarket (72%) saw the largest increase in persons speaking non-official home languages between 2001 to 2006[34].

---

[28] York Region Community Social Data Consortium. Just the Facts About Your Community: Diversity of Residents Living in York Region: Immigration and Mobility. Published November 2008, based on 2006 Census Data.

[29] York Region Community Social Data Consortium. Just the Facts: About Your Community: Languages of Residents Living in York Region. Published October 2008, based on 2006 Census Data.

[30] York Region Community Social Data Consortium. Just the Facts: About Your Community: Languages of Residents Living in York Region. Published October 2008, based on 2006 Census Data.

[31] York Region Community Social Data Consortium. Just the Facts: About Your Community: Languages of Residents Living in York Region. Published October 2008, based on 2006 Census Data.

[32] Thomas, Derrick. Statistics Canada. The Impact of Working in a Non-Official Language on Occupations and Earnings of Immigrants in Canada. Accessed from http://www.statcan.gc.ca/pub/11-008-x/2009001/article/10771-eng.htm on Aug, 13, 2009. Last modified April 15, 2009.

[33] Thomas, Derrick. Statistics Canada. The Impact of Working in a Non-Official Language on Occupations and Earnings of Immigrants in Canada. Accessed from http://www.statcan.gc.ca/pub/11-008-x/2009001/article/10771-eng.htm on Aug, 13, 2009. Last modified April 15, 2009.

[34] York Region Community Social Data Consortium. Just the Facts: About Your Community: Languages of Residents Living in York Region. Published October 2008, based on 2006 Census Data.

Table 2.4: Non-Official Languages Spoken at Home, York Region, 2001 and 2006

Language	2001	2006	Percent Change
Chinese languages	71,735	94,270	31%
Italian	19,895	19,975	less than 1%
Russian	10,600	18,600	76%
Persian (Farsi)	5,970	14,210	138%
Tamil	4,580	11,745	156%
Korean	3,955	7,745	89%
Urdu	3,240	7,085	119%
Punjabi	5,275	7,010	33%
Spanish	3,650	5,935	63%
Gujarati	3,360	4,585	36%

Source: Statistics Canada, Census 2001 and 2006

2.7 Labour Force

Labour Force Replacement

An important consideration when looking at the labour force is the labour force replacement ratio (LFR ratio). This is the proportion (or ratio) of the population 14 years old or younger to the number of people between 50 and 64 years inclusive. A ratio greater than one reflects a long-term growth in the size of the economically active population, while an LFR less than one represents a long-term contraction of the labour force. From 2001 to 2006, Canada shifted to a contracting work force[35]. York Region's LFR decreased from 1.3 to 1.1 between 2001 and 2006, suggesting a slower growing work force in the long-term (Toronto's has dropped below 1.0 while the rest of the GTA has seen similar reductions to York Region)[36].

It is projected that over the next 20 years York Region will see the LFR drop from above 1.0 to below 1.0, suggesting a long-term labour force contraction. The trend of the LFR shows it will undergo a correction toward 1.0 beyond 2021. Although the dropping LFR "does not pose an immediate threat […], an aging population and low birth rates will heighten the importance of immigration and internal migration [and] those municipalities not already benefiting from strong in-migration will face the greatest challenges in maintaining their labour force."[37]

---

[35] Federation of Canadian Municipalities. Quality of Life in Canadian Communities: Theme Report #5: Immigration and Diversity in Canadian Cities and Communities. Published March 2009.
[36] Federation of Canadian Municipalities. Quality of Life in Canadian Communities: Theme Report #5: Immigration and Diversity in Canadian Cities and Communities. Published March 2009.
[37] Federation of Canadian Municipalities (FCM): City Mayors. FCM report warns of erosion of quality of life in Canadian cities. Accessed from http://www.citymayors.com/society/cancities_quality.html on Aug. 26, 2009; last modified on May 9, 2004.

Table 2.5: York Region's Labour Force Replacement Ratio, 2001 to 2031[38].

Year	Total Pop. (0-14 Yrs)	Total Pop. (50-64 Yrs)	LFR
2001	162,107	121,863	1.33
2006	185,687	166,659	1.11
2011	192,363	213,271	0.90
2016	205,009	248,750	0.82
2021	219,935	270,984	0.81
2026	233,780	277,656	0.84
2031	244,323	281,112	0.87

Recent Immigrant Labour Force Activity

In light of the above numbers which point to a contracting labour force, putting in place services and supports and removing barriers to ensure the rapid and early integration of immigrants will be paramount to maintaining a strong economy in York Region. The importance of this issue is elevated when considering the following:

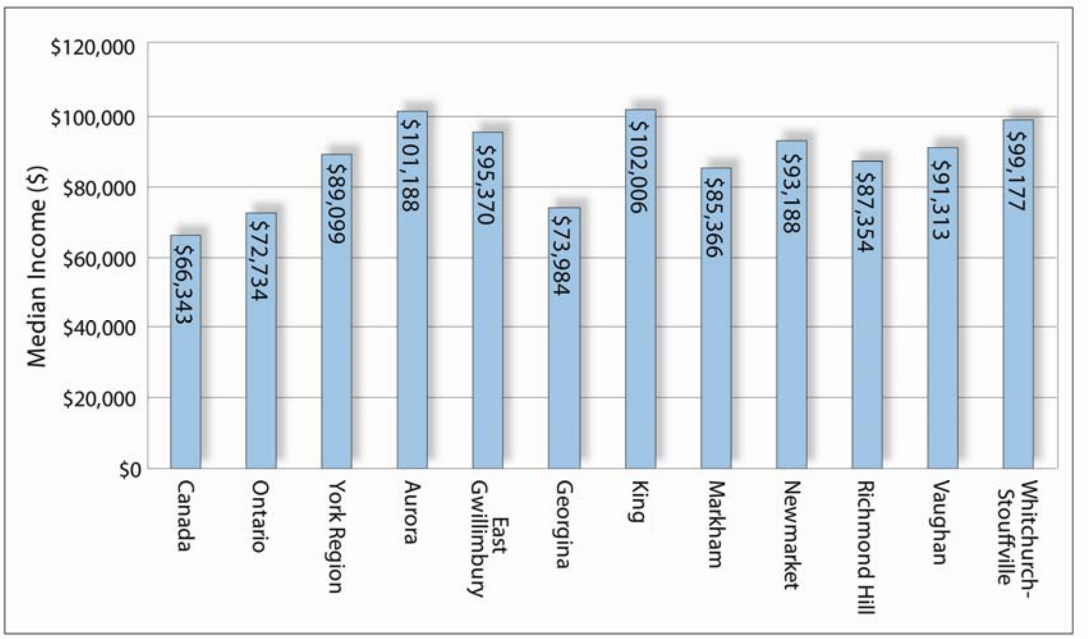
- In 2006, the unemployment rate among recent immigrants (arriving between 2001 and 2006) was 9%, nearly double the rate of 5.4% for all of York Region[39].
- Conversely, the percentage of recent immigrants in York Region, 15 years of age and older, holding a university certificate, degree or diploma was approximately 48% compared to 32% for all of York Region[40].
- Across Canada in 2006, 28% of recent immigrant men and 40% of recent immigrant women held jobs with low educational requirements while holding university degrees, compared to 10% and 12% respectively for native-born Canadians[41]. This trend is evident with recent immigrants as well as for established immigrants which is suggesting that "difficulties experienced by recent immigrants are not necessarily temporary"[42].

[38] Based on York Region's population projections to 2031. Calculation is achieved by dividing population aged 50-64 by population aged 0-14, and reported as a decimal.
[39] Statistics Canada. 2006 Community Profiles and 2006 Census: York Region custom tabulation
[40] Statistics Canada. 2006 Census: York Region custom tabulation
[41] Statistics Canada. Galarneau D., Morissette R. Perspectives: Immigrants' Education and Required Job Skills. December 2008. Statistics Canada Catalogue no. 75-001-X.
[42] Statistics Canada. Galarneau D., Morissette R. Perspectives: Immigrants' Education and Required Job Skills. December 2008. Statistics Canada Catalogue no. 75-001-X.

2.8 Income

As reflected in Figure 2.3, York Region has an Economic Family Income higher than both Ontario and Canada. The graph also shows the diverse range of incomes earned across the region's nine municipalities.

Figure 2.3: Median Income for Economic Families, Canada, Ontario, York Region and Local Municipalities, 2006



Source: Statistics Canada, Census 2006

Low-Income Population

Not everyone in York Region is prospering financially. Between 2001 and 2006, the number of residents in York Region living in low income[43] households increased 55% to 112,501 residents or 13% of the population while the percentage of children living in low income households increased by 62% to 32,500.

2.9 Housing

Housing Mix

As illustrated in Table 2.6 below, the majority of housing units in York Region are single-detached dwellings. However, between 2001 and 2006 the share of non single-detached dwellings increased from 25.4% to 27.8%. It is anticipated that this trend will continue as

[43] York Region Community Social Data Consortium. Just the Facts: About Your Community: Employment and Income. February 2009.

York Region becomes more urban and shifts from a suburban model to a city building model in its regional centres and corridors.

Table 2.6: Housing Mix, York Region & Ontario, 2006 Census[44]

	York Region		Ontario	
Total - Population	**886,575**	**100.0%**	**12,160,282**	**100.0%**
Total – Private Households	**275,680**	**100.0%**	**4,554,255**	**100.0%**
Single-detached	187,975	68.2%	2,551,760	56.0%
Attached Housing (includes semi-detached, row & Apartment, duplex)	58,340	21.2%	777,420	17.1%
Apartment with <5 storeys	9,485	3.4%	490,355	10.8%
Apartment with 5+ storeys	19,540	7.1%	710,786	15.6%
Source: Statistics Canada, Standard Census Profile 2006				

It is estimated that between 2006 and 2031, York Region will add an average of 8,000 to 10,000 new housing units per year to accommodate the projected population growth. The region would also like to move toward a 50/50 split between single detached and non-single detached housing types by 2031[45].

Tenure

Home ownership rates increased from 86% in 2001 to 88% in 2006[46]. This is much higher than the Ontario rate of 71% and the national rate of 68%. Correspondingly, in 2006, only 12% of the region's total dwellings were rented (down slightly from 14% in 2001)[47], the lowest percentage in the GTA[48]. In comparison, 29% of the total dwellings in Ontario and 31% in Canada were rented[49]. In fact, York Region had the lowest vacancy rate in the GTA (1.8%) in 2009, well below the 3% rate that the Canada Mortgage and Housing Corporation considers healthy[50] [51].

Affordability

Housing is not affordable for many residents within the region. From 2006 to 2008, the cumulative average resale price of a single detached dwelling in York Region rose 11% from

44 Statistics Canada. 2006 Census Community Profile: York Region
45 York Region Official Plan, December 2009, p 35-36.
46 York Region Community Social Data Consortium. Just the Facts About your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
47 York Region Community Social Data Consortium. Just the Facts About your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
48 York Region Regional Council Meeting. Report 4 of the Community Services and Housing Committee. Clause 8: Where's Home? 2008: Report on Housing Need in Ontario. May 21, 2009.
49 York Region Community Social Data Consortium. Just the Facts About your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
50 Market Rental Report – Fall 2009, Canada Mortgage and Housing Corporation.
51 York Region Regional Council Meeting. Report 4 of the Community Services and Housing Committee. Clause 8: Where's Home? 2008: Report on Housing Need in Ontario. May 21, 2009.

$458,636 to $508,892[52]. The average resale price for a semi-detached dwelling was $345,789, a row house, $331,097, and a condominium/apartment, $257,115[53].

Where's Home? 2008, a report by the Ontario Non-Profit Housing Association (ONPHA) and the Co-operative Housing Federation of Canada (CHF Canada) Ontario Region on housing need in Ontario, showed that York Region had the second highest average market rent for a two bedroom apartment at $1,040 in 2007, second only to Toronto at $1,072 [54].

Housing affordability is an issue for a number of residents in York Region as the following indicators show:

- In 2006, 27% of homeowners in York Region spent 30% or more of their household income on housing costs, substantially higher than Ontario (21%) and Canada (18%). Spending 30% or more of household income on housing costs is a commonly used affordability threshold. Spending more than this can make it difficult to pay for necessities such as food, clothing, education and transportation[55].
- In 2006, 48% of the 32,255 renters spent 30% or more of their household income on housing costs - higher than both Ontario (44%) and Canada (40%)[56].
- Households more likely to spend 30% or more of household income on housing costs were one-person households and lone-parent households[57]. Couples without children were least likely to exceed this threshold[58].

2.10 Urban Intensification: Potential Opportunities and Challenges

This section briefly reviews the potential challenges and opportunities to human service expenditures created by increased urban intensification as York Region grows. The preceding population forecasts provide the basis for the expenditure projections in this report. An implicit assumption in the expenditure projections is that the physical distribution of the population will not affect human service expenditure levels. While the growth of population cohorts is the principal driver of expenditures, the way in which a community physically evolves may move growth patterns marginally upwards or downwards compared to the base case projections.

[52] York Region. Planning & Development Services Department. Planning Economic Development and Review 2008.
[53] York Region. Planning Economic Development and Review 2008.
[54] Ontario Non-Profit Housing Association (ONPHA) and the Co-operative Housing Federation of Canada (CHF Canada) Ontario Region. Where's Home? 2008. Published April 2009 (Revised).
[55] York Region Community Social Data Consortium. Just the Facts About your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
[56] York Region Community Social Data Consortium. Just the Facts About your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
[57] York Region Community Social Data Consortium. Just the Facts About your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.
[58] York Region Community Social Data Consortium. Just the Facts About your Community: Housing and Shelter Costs in York Region. Published February 2009, based on 2006 Census Data.

The recently updated York Region Official Plan contains a series of goals, objectives and policies that will both promote and require more intensive development as the region grows over the next 20-30 years. For instance, the new Official Plan has moved to a city building model for the regional centres and corridors and requires that by 2015 a minimum of 40% of all new residential development occur within existing built-up areas. The impacts of more intensive urban development in terms of the quality of life, mobility, and social interaction may be substantial. For example, a variety of housing options that make it more likely that people will live in the urban core contributes to social cohesion and community identification; and communities that encourage walking and cycling contribute to long-term health. These impacts are potentially substantial, and in turn they may affect the expenditure on human services and the manner in which these services are delivered. It is only these latter effects on expenditures that are our focus.

Population density affects human services but its impact is difficult to estimate. For a given population, the demand for human services and the cost of providing human services may be affected by population density. This can occur in two ways:

1) for a given population (i.e., size and socio-demographic structure), the demand for a service may vary with increased intensification; and
2) for a given population (i.e., size and socio-demographic structure) the unit cost of provision may vary with increased intensification.

It is the combined impact of these two effects that will determine how expenditures will vary with intensification, compared to the "base case" scenario.

Before continuing, we need to qualify that it is not possible, given data requirements and the existing relevant literature, to provide numerical estimates of these effects.[59] We are limited to suggesting directions of change, and to suggest potential opportunities and challenges that may arise as a result.

Depending on the specific service, intensification is likely to present potential opportunities (e.g. efficiency, improved access) as well as potential challenges (e.g. higher land costs).

We can illustrate these potential modifications of underlying trends with a few examples pertaining to important service areas. First, a community's public transit system is obviously crucial to creating opportunities for mobility and accessibility, and at the same time, transit is the human service that is perhaps most impacted by the pattern of development of the urban area. The unit costs to provide transit services clearly decrease as a given population

[59] The literature that deals with the relationship between human services and intensification is very limited. There are a few studies which attempt to estimate these relationships for specific services. Other research examines the question of economies of scale, that is, the link between service costs and population size. It is important to emphasize that our discussion addresses a different question: for a given population size, what is the relationship between services and intensification (population density). For general discussions that touch on these issues see: Conference Board, 2007; Gurin, 2003; O'Toole, 2001; Williams, 1999; Behan, et. al., 2007; and Ladd, 1992.

becomes more concentrated (e.g., on average, more concentrated route systems and higher ridership levels per kilometre of route). On the demand side, greater intensification likely encourages people to shift from private vehicles to public transit because concentration fosters better quality services (e.g., more frequent service along fewer routes; improved access to transit stops) and that in turn increases demand (Behan, et. al., 2007).

A second example relates to social housing. The dominant factor might be that if growth is more concentrated in core areas, the cost of land in those areas will be higher than in areas with more dispersed growth. To the extent that higher core area land values drive up housing costs, increased intensification may result in higher occupancy costs for each housing type than would be the case in a more dispersed city. In turn, this may generate increased housing affordability problems and an increased demand for social housing (Cullen, 2005). On the other hand, high density growth scenarios can provide residents with a wider range of housing options, including apartments and town homes, which may be more affordable than single-family housing units. On the supply side, increased land values may increase the costs of providing social housing in the core areas and decrease costs elsewhere. If—consistent with an intensification objective—social housing was provided in the core areas, we would expect that costs and expenditure levels to increase relative to levels in a less intensified development pattern, but these impacts may be mitigated by the increased diversity of housing types.

For a final example, we take the case of hospitals. There is some evidence that in more intensively developed urban areas people do more walking and less car-commuting – which results in healthier people. Further, with fewer cars on the road, air quality may improve and result in less demand for care related to illnesses such as asthma and other respiratory diseases. However, other studies suggest that the compact city may present a health risk due to localized pockets of air pollution (Burton, 2000). If the positive effects are significant, it would reduce the per capita demand for health care services in general and for hospital services in particular. On the supply side, other than the land cost factor noted above, there are unlikely to be any systematic cost implications of intensification.

These examples suggest that underlying human service expenditure trends are likely to be only marginally altered by intensification. However, several interesting opportunities and challenges may arise. Human services that involve substantial physical infrastructures (such as hospitals, schools and social housing) could face significantly higher land costs compared to a less intensive development scenario. More intensified development will lead to relatively higher land values in the core areas and relatively lower values in the non-core areas compared to a dispersed pattern of development. If human service infrastructure facilities are located in the core areas - as they presumably would be as part of the intensification strategy—this component of costs could be appreciably higher compared to a non-intensified scenario. These increased costs would be in the form of the initial land cost.

On the other hand, with more intensive development, it likely becomes more feasible for different human services to share facilities and, therefore, the impact of higher land costs would be lessened. (Sharing facilities may be less acceptable in the case of dispersed development because there would be pressure to distribute government offices and services more broadly throughout the region.)

While locating human service sites in the intensively developed core areas would likely increase the land cost component of providing human services, from a more general social perspective, this may still be the most efficient arrangement. Consider the alternative of locating a hospital or a school in an outlying area where land costs are lower. The trade-off for doing so would be to impose higher commuting costs on employees and clients, and in total these costs may well exceed cost savings realized by governments. In addition, non-central locations of important public facilities would probably require the deployment of dedicated transit services (such as a special bus line to a hospital or school bussing) which would be expensive to provide. Thus, it is important to consider the overall costs of human services provision (including costs borne by individuals in the community) and we encourage governments to undertake comprehensive cost benefit analyses of location decisions as opposed to making decisions based only on the financial costs incurred by the service providers.

3. Policy Context

This chapter highlights the key contextual trends affecting the demand and supply of human services in York Region.

3.1 Public Policy and Human Services

The policy context for human services in York Region is, to a large extent, influenced by provincial and federal government priorities and policies. The participation and capacities of the voluntary and private sectors, as well as everyday citizens are also key variables in influencing who can and should do what in shaping public policy and delivering human services. In addition, broader trends such as those related to municipal planning, public service management and sustainable development can influence the direction of human services.

To gain better insight into the human services environment within York Region, interviews were conducted with key service providers and funders. People were selected based on a list provided by York Region and included representatives of the former Human Services Planning Coalition. Additional people were added to the list when they were identified in the course of our work as key individuals. In total, over 35 professionals and practitioners were consulted.

In general, the objectives of the consultations were to:

- better understand the context and policy environment of a given human service;
- identify pressures affecting the current demand for human services;
- predict factors which might influence the future demand for human services; and,
- explore the strengths, challenges and measures needed to meet the demands for human services.

The following trends synthesize comments received through the consultation process and a review of recent or pending provincial government policy decisions.

While by no means an exhaustive or comprehensive analysis, it does provide a "perceptual snapshot" of trends considered to be important to human service expenditures in York Region.

3.2 Perceptual Trends

Demographic Changes: First, reflecting on the data in Chapter 2, changes to the region's population are considered to be the most pressing factor—affecting human services on at least three levels:

- ***Growth***: The absolute number of people moving to the region is directly increasing the demand for virtually all human services in obvious and less obvious ways. A few examples suggest the range of impacts. Over the last 10 years, student enrollment in the education system has increased (including K-12 and college levels). The surge of new restaurants in the area is placing higher demands on public health inspectors. In addition to businesses, new community and non-profit organizations are being established, which is increasing competition for grants and contributions.

- ***Aging:*** The changing composition of the population is prompting agencies to plan for and change the way in which they deliver services. Population aging is one example. The Central LHIN, which covers most of York Region, is planning for a major increase in the seniors population[60]. Over the next decade (from 2008) the seniors population will grow by more than 40%, giving the Central LHIN the largest absolute number of seniors in the province. This will increase the demand for acute and non-acute care. For instance, long-term care is expected to double service levels by 2021.[61]

- ***Poverty:*** While York Region is, on average, wealthier than the overall Ontario population, a growing low income population is nevertheless a concern. The low income population in York Region increased by 55% between 2001 and 2006, and its absolute size is expected to continue growing. Children (under 18), seniors, immigrants, and lone-parent families make up disproportionate shares of the low income population (2006 Census). The increase in the number of low-income families living in York Region is putting pressure on several interrelated human services. The lack of affordable housing in the region was frequently raised by human service interviewees as a high priority, particularly given that York Region has the lowest proportion of rental dwellings in the GTA at 12%.[62] There are also increasing pressures on case loads for social assistance and child care subsidies.

- ***Diversity:*** Human service representatives are observing that the pace and concentration of the population changes are affecting human services. For instance, one representative mentioned that it "took Toronto 50 years to become as diverse as it took the Region to become in 10 years". In terms of service delivery, school boards and municipalities are offering new and accommodating programming

[60] Central LHIN, Health Service Needs Assessment and Gap Analysis, at http://www.centrallhin.on.ca
[61] Internal document provided by long-term care, based on 2001 census data.
[62] Regional Municipality of York, "Community Social Data Strategy Update," Community Services and Housing Committee, February 2008.

choices to recognize a more multicultural community (e.g. English as a Second Language programming).[63]

- ***Intensity:*** Officials are recognizing that intensity of population changes is affecting the urban, suburban and rural communities of the region in different ways. For instance, five of the municipalities are experiencing a decrease in the number of people between 0–14 years but an increase in the number of people above age 65 years.[64] Thus, more local tailoring of human services is being explored. The degree in which municipalities choose to intensify (i.e. become more urban) may also affect the shifts in the supply and demand for human services. These issues were discussed in Chapter 2 of this report.

Funding: York Regional Council has taken action to support urgently needed community services. As well, the former Human Services Planning Coalition carried out extensive research and advocacy work around the historic underfunding of human services[65]. While a full investigation of funding arrangements is well beyond the scope of this report, we note briefly that financial support for human services is a crucial policy context factor, particularly on four fronts:

1. ***Funding gaps:*** Some human service providers are finding that they are still "catching up" from old funding formulas and/or cut-backs and freezes. Significant funding gaps related to social services funding are being tracked (e.g. child care services, social assistance, social housing). While the number of licensed child care spaces has increased by 85% since 2000, provincial funding has not kept pace to provide child care subsidies to the families that need them. The Region was able to support, for example, 17% of the proportion of licensed child spaces in 1998 and in 2007 it supported about 10% of spaces. York Region's per capita funding in 2007-2008 for children's services is about 70% of the Ontario average.[66] In terms of cut-backs, the school boards are still trying to re-introduce or expand programming in areas previously down-sized from their operational budgets in the 1990s (while hiring new teachers to accommodate student population increases). The recent Ontario government decision to move to full-day kindergarten will increase the pressures faced by school boards.

2. ***Lack of Funding Predictability***: In some cases, human service providers have found that one-time funding investments, changes to funding levels and/or relatively short-funding cycles are making it difficult to plan longer-term human service

[63] Language programming is seen to be particularly important in the Region given that York Region has the "highest percentage of recent immigrants that have no *knowledge of* either *official language* in relation to other GTA municipalities." York Region, "Community Snapshots: Recent Immigrants Living in York," n.d., p.7.
[64] Regional Municipality of York, "Community Social Data Strategy Update," Community Services and Housing Committee, February 2008. Municipalities include: East Gwillimbury, Georgina, King, Newmarket, and Whitchurch-Stouffville.
[65] Examples of the Coalition's work include the development and implementation of a joint public affairs and government relations strategy, and the release of the "Fair is Fair" report (2002) and "Toward a new Funding Model for Social Services" (2003).
[66] These data are from the work of the Strong Communities Coalition (SCC) formed in 2005.

expenditures. This can mainly be attributed to funding decisions made by other levels of government. For example, in the months leading up to the release of the 2010 Provincial Budget, a great deal of uncertainty surrounded the 2010 funding for Ontario's "Best Start" program, which supports programming and services for children. While recommendations of the recent Pascal report on early learning and child care were being introduced and moving towards the first phases of implementation, the province informed Municipal Service Managers including York Region that they would receive significantly less funding in 2010 as a result of the end of certain federal child care funding. The funding cut indicated would impact spaces in Early Intervention Services for children with special needs along with a number of fee assisted child care spaces. In response, York Regional Council invested additional tax levy dollars through the 2010 budget process to help offset the impacts. It now appears that the province is reversing the decision to reduce the funding through an additional provincial investment, although there still remains concern about future funding. This example illustrates the significant challenges around longer-term planning in the face of funding uncertainties.

The lack of predictable funding from the province is affecting how the Region supports and "contracts out" the delivery of some human services. While Regional Council has instituted some stabilized funding, generally, community-based and voluntary organizations need to compete on an annual basis for financial support. This instability of funding on a federal, provincial and municipal level contributes to a situation where it is difficult for organizations to build a strong 'infrastructure' (e.g. human resources, financial systems etc.) to support the delivery of human services (let alone preparing the funding proposals themselves).

3. ***Cost-sharing:*** In some cases, human services have seen change to the sharing of costs between federal, provincial and municipal governments. For instance, in 1998 the National Child Benefit Supplement (NCBS) was introduced by the federal government. The province of Ontario opted to deduct the entire amount of the new NCBS from families who received social assistance. The province requires municipalities to re-invest their 20% of NCBS dollars into local supports and programs that meet community needs and the federal NCB objectives. These funds represent about 40% of the total of the Region's Community Development Investment Fund budget in 2007. However, given changes to GTA pooling, the introduction of the Ontario Child Benefit, and the move to upload social welfare costs to the province (see below), the expectation is that municipalities are in a position to support their community programs. With the elimination of the NCBS dollars, the Region lost a crucial source of funding. However, unlike some municipalities, Regional Council opted to replace these dollars with municipal dollars. This action was a proactive and much needed boost to community funding.

4. ***Models***: There is increasing importance being placed on generating new forms of revenue for human services. For instance, the new recreation centre in the Town of Newmarket benefited from a partnership with Magna and other companies (e.g. Tim Hortons, Midas) to underwrite the construction costs of the facility. The Town is exploring an ancillary revenue stream to minimize costs to taxpayers (e.g. commercial lease space, vending opportunities).[67] Interest in such funding models is expected to grow in the future.

Legislative Changes: Third, new or amended legislation and regulation are affecting the structure, mandate and operational funding of human service providers. Here are several examples.

- ***LHINS:*** The introduction of the *Local Health Integration Networks (LHINS) Act* in 2006 is completely transforming the way the Region's health care system is managed. The Act now charges the LHINS with planning, integrating and funding health care services. (We also note that regional planning is made more complicated because the geographic boundaries of the Central LHIN are not consistent with the geographic boundaries of York Region.)

- ***Environmental Conservation:*** The *Oak Ridges Moraine Conservation Act*, passed in May 2001 clarifies the long-term protection and management of the 190,000 hectares within the Moraine, crossing thirty-two municipalities in three regions (Peel, York and Durham). Not only does the legislation affect operational budgets (e.g., recreation paths), this legislation will influence planning choices relating to urban intensification (e.g. transit).

- ***Social Assistance:*** The Region has seen an expansion in the eligibility for income assistance and other subsidy programs based on revised criteria for income testing. While there are also cyclical effects corresponding to economic downturns, the long-term demand trend (relative to population) is more difficult to discern once policy changes are factored in. For example, the recession of 2008-09 has increased case loads. Waiting lists and referrals are increasing but it is difficult to determine if there is an increase in long-term demand for such services or if the programs are simply becoming more accessible to a greater number of people.

  In the fall of 2008, the "Provincial-Municipal Fiscal and Service Delivery Review", a consensus report among the Province of Ontario, the Association of Municipalities of Ontario (AMO) and the City of Toronto was released[68]. The joint agreement involves a multi-phase uploading of social assistance costs from the local municipalities to the province under the Ontario Works (OW), Ontario Drug Benefit (ODB) and the Ontario Disability Support (ODS) programs. The province

[67] Town of Newmarket, News Release, June 15, 2006 (http://www.newmarket.ca/userfiles/HTML/nts_1_3341_1.html).
[68] Association of Municipalities of Ontario. Provincial Municipal Fiscal & Service Delivery Review. Fall 2008.

projects that the total benefit to Ontario municipalities will be $1.5 billion[69]. York Region is projected to realize a net total benefit of approximately $52 million[70].

Benefits under the Ontario Works program were funded 80% by the provincial government and 20% by local municipalities. The 20% municipal share will be gradually decreased over the next decade and fully transferred to the provincial government by 2018. While the administration costs of the Ontario Disability Support Program (ODSP) have been 100% funded by the provincial government, municipalities have been required to pay 20% of ODSP benefits. However, the municipal share is to be reduced to 10% in 2010, and then to 0% in 2011[71]. As of 2009, the Ontario Drug Benefit (benefits and administrative costs) have been fully uploaded to the province[72].

It is noted that The *Poverty Reduction Act 2009* was passed May 6, 2009 with unanimous consent from all parties. It will require successive governments to report annually on their initiatives to reduce poverty and refresh the strategy at least every five years. According to a January 2009 Regional staff report, "[e]ven if the target set by the province to reduce child poverty by 25 percent is met, in the unlikely event that this population remains static, it would bring the number of children living below the low-income cut-off down (in York Region) to just over 24,000 children – still higher than the number in 2001. This underlines the importance of continuing to support programs for our low-income residents such as affordable and accessible transportation, child care supports, affordable housing and other regionally delivered programs that address and prevent poverty."[73]

- ***Operational Costs:*** Other provincially-controlled changes to legislation are affecting human services. Examples include property assessment/taxation laws and the recent amendments to Ontario's *Pay Equity Act*. For instance, municipal long-term care facilities are experiencing challenges in managing higher wage costs without increases in provincial subsidies.[74] Another example is the new *Residential Tenancies Act* (2006) which is changing the operational environment for social housing.

  In some cases, the lack of legislation is also affecting human services providers. For instance, the absence of a provincial or federal policy on child care has made this human service vulnerable to expenditure changes, depending on the government of the day. Further, while policy and regulation describe how developmental services

[69] Association of Municipalities of Ontario. Provincial Municipal Fiscal & Service Delivery Review. Fall 2008. Supporting document: 2018 Projected Estimates.
[70] Ibid. In addition to focusing on these main programs, the report briefly mentions future considerations and goals for road infrastructure, transit, public health, social care and public health services.
[71] Ibid.
[72] Ibid.
[73] York Region. Committee Reports. Report No. 1 of the Community Services and Housing Committee Regional Council Meeting of January 22, 2009. Ontario's Poverty Reduction Strategy Update – Preliminary Review.
[74] Regional Municipality of York, Backgrounder, LTC Funding and Staffing Issues, n.d.

are to be delivered, funding is not mandated as it is with health, education or child protection.

Service Integration: Fourth, picking up on a broader trend to build sustainable and resilient communities, the Region is exploring more place-based and people-centred approaches—both within and across human services. This is sometimes called 'joined up governance'. These approaches involve collaboration, partnerships or networks whereby different services led by autonomous organizations, work together to strengthen human services in an integrated, comprehensive manner—whether it be child care, early intervention services, health care or police services.

Integrating and coordinating services is likely to involve cost implications. In general, integrating services for the region's most vulnerable populations allows for a more holistic approach to service delivery. There may be additional upfront costs to ensure that service integration efforts are coordinated and supported. Over time, however, there may be efficiencies to the overall human service infrastructure if programs become better integrated from the view of a) service providers themselves (e.g. administrators); b) service users (e.g. clients) and other community members (e.g. politicians, other residents).[75]

In addition to the Region's growth management and sustainability strategy, examples of other service integration trends include:

- ***Comprehensive Service Integration*:** There is growing interest in how to overcome barriers and complex risk factors across multiple environments (e.g. school and home). For instance, in our interviews, providers indicated that they increasingly see how knowledge sharing can increase the capacity of providers to respond to client needs.
- ***Cross-Sectoral Collaboration:*** There is concrete experience in bringing a range of organizations together to address challenging human service issues. The former Human Services Planning Coalition's experience on the Inclusivity Action Plan (IAP) and the Welcome Centre are good examples.

  York Region, in partnership with the Catholic Community Services of York Region, is currently developing an Immigration Settlement Strategy, a project funded through the federally-sponsored Local Immigration Partnership initiative. A key component of the project is establishing a Community Partnership Council that "will connect sectors that are critical to the successful integration of recent immigrants including settlement services, language training providers, employers, labour market development, educational programs, and community services to create a meaningful, comprehensive Immigration Settlement Strategy reflective of York Region."

[75] Browne et al, "Conceptualizing and validating the human services integration measure," *International Journal of Integrated Care,* Vol. 4, May 2004.

York Regional Council has also recently restated its commitment to facilitate strategic and collaborative approaches to address the growing human service demands and pressures through the approval of the establishment of the Human Services Planning Board of York Region (HSPB-YR).

- ***Bridging Services***: Service providers are increasingly focusing on providing greater continuity of care to residents. For instance, the Ontario Trillium Foundation is trying to target grants to organizations that can help residents connect between different service providers.
- ***Interrelationship between Services:*** There seems to be a renewed appreciation in thinking about how one human service will affect another. Considering how accessible emergency shelters and social housing services are to public transportation is one such example. Another example is the set of aging at home strategies, without which the pressures on long-term care facilities would be even greater than it is.

Service Delivery: Fifth, expectations on the quality and quantity of human services appear to be increasing, which may influence expenditures.

- ***Scope***: In some cases, human service providers are seeing an expansion in their mandate—putting new pressures on operational costs. For instance, public health officials are adding responsibilities to deal with air-borne illnesses such as preventing contraction of the West Nile virus and to plan responses for health emergencies like SARS and the H1N1 flu. Another example is the provincial government's move from half-time to full-time junior and senior kindergarten. At the same time, this move could reduce the scope or provision of services for some child care operators.

- ***Level***: The priority for many of the region's human service providers is to target the most "pressing" and "hardest to serve" clients. Victims of abuse, for instance, get moved to the top of the waiting list for social housing. While there are very good reasons for doing this, it is difficult for the Region to meet the service needs of other clients. Similarly, employment and long-term care services tend to help clients with complex challenges such as those with mental health issues. This requires funding to support increases in staffing levels, skills, and training.

- ***Standards***: Initiatives to enhance service standards are also being put in place. For instance, Ontario's "wait time strategy" for hospitals provides monthly updates on the number of days it takes to receive certain procedures in York Region (e.g. joint replacements, cancer surgeries).

Evidence-Based Decision Making: Sixth, performance monitoring and public accountability measures and standards are becoming increasingly important in helping politicians make informed decisions based on sound evidence. For instance, York Region's Community Social Data Strategy Consortium works in partnership with other municipalities to "group buy" Statistics Canada Census data. These data are presented to the Region's decision makers and its community partners doing front-line service delivery. In addition to accessing good statistical information, the Region is likely to encounter more pressure on human services programs to track data and results. This is part of a general public management trend toward accountability and results-based management.

It is recognized that in the context of severely restrained resources, providers are often not in a position to implement evidence-based decisions and often, under extreme pressure, must resort to "make do" decisions. For example, too often, these may be decisions to reduce wait lists or wait times rather than best practices in terms of the needs of clients. In such cases, results may conform to best practices from the perspective of budgetary accountability, but not in terms of the real impact of human services on populations.

Community Involvement: Finally, like other municipalities, human service providers in York Region are experiencing a critical tension in how to involve their communities. Providers would like to obtain input from a wide variety of residents (especially clients) to improve services and strengthen community vitality. One example is the Region's efforts to obtain feedback from the public and stakeholders during its Sustainability Symposium, the Towards Sustainability in York Region (TSYR) Advisory Group and the Growth Management Public Engagement Initiative. Another example is the Community and Health Service Department's Multi-Year Plan which is to be finalized this year. At Regional Council's direction, the Multi-Year Plan will guide Community and Health Services programs, services and investments over the next five years to better meet emerging and pressing human service needs, and changing provincial policy directions - particularly where new or enhanced investments need to be considered. Extensive consultations, including focus groups with staff, program clients and community agencies, were an integral part of the process to develop the Multi-Year Plan.[76]

At the same time, providers sometimes experience a backlash from communities when situating some human services (e.g. social housing) in their neighbourhoods (i.e. Not in My Backyard syndrome, NIMBY). Balancing this tension is proving to be challenging.

3.3 Implications of Policy Trends

Drawing on these perceptual trends, we can reiterate four general implications for human services spending in York Region.

1. **Other Governmental Priorities**: First, the policy context of the provincial and federal governments has created a great deal of uncertainty among human service programs. For instance, changes in federal government immigration policy can have major impacts on the pattern of growth of York Region's population. Provincial

[76] "Draft Community and Health Services Multi-Year Plan" - Report No. 5 of the Community and Health Services Committee, Regional Council Meeting of June 24, 2010. York.ca. June 23, 2010. http://www.york.ca/Regional+Government/Agendas+Minutes+and+Reports/_2010/CA.htm

government priorities can influence York Region's human services to an even greater degree. For instance, the Government of Ontario's poverty reduction strategy will likely significantly impact a number of human services in York Region (e.g. social assistance, child benefits, etc.) Impacts may include the Region's leadership and responsibility to achieve targets, monitor progress and undertake annual reporting.

While this uncertainty has often made it difficult for programs to plan their operational budgets, human service representatives suggest that other governmental priorities should not be an excuse to rely too much on reactionary approaches. Increased effort in strategic, evidence-based planning would allow human service providers to manage new provincial and federal policy priorities more smoothly. The importance of investing in staff training, particularly on strategic and evidence-based planning, for instance, was recognized as a priority for the Region.

2. **Funding**: Second, as noted earlier, all service providers mentioned that significant core or infrastructure funding is a major challenge in human service expenditure planning. Further, as we have seen, uncertainty surrounds the transfers from governments. Moreover, in addition to the operational spending (e.g. child care) needed to ensure an adequate level and standard of human services in York Region (which is the focus of this report), service providers are also facing large capital investments in facilities (e.g., social housing, long term care) over this period.

   York Region, like other municipalities in the province, has recently received sizeable funding transfers from senior levels of government for capital investment purposes (e.g., $53 million in Investing in Ontario funding and $25.20 million under Year 2 of the Canada-Ontario Affordable Housing Program 2009 Extension). While the Region is certainly grateful for this financial support, they, like all municipalities would also like to work with senior levels of government to establish a longer term sustainable funding strategy regarding capital investment in critical human services infrastructure.

3. **Innovation**: Third, investigating and pursuing practical and creative approaches to human service delivery may result in more effective and cost-efficient programs. For instance, a significant portion of the demand for long-term care facilities could be alleviated if more support was provided for older adults to live at home longer. The province's Aging at Home Strategy, currently a major initiative of LHINs, is important in this regard[77]. Another example is for land ambulances to provide transport to a broader set of services and facilities in addition to hospitals. While increasing spending for emergency response, this may decrease overall costs for health-related costs.

[77] http://www.centrallhin.on.ca/uploadedFiles/Public_Community/Aging_At_Home/2009-10AAHAllocationStrategy_final.pdf

4. **Strengthening relationships**: Finally, building and maintaining relationships among providers is seen as a real asset to meeting future demands of human services in York Region. For instance, a greater level of awareness and mutual trust was built among human service providers through the work of the former Human Services Planning Coalition on such initiatives as the Inclusivity Action Plan and Welcome Centre. It is believed that benefits of this collective experience can be carried forward to future projects. However, representatives show an interest in deepening their relationships through, for example, more knowledge sharing and collaborative strategic planning.

4. Methodology – Expenditure Forecasting

This chapter outlines the definitions, forecasting model, data collection tools and limitations for the expenditure analysis of this study.

4.1 Human Services: An Operational Definition

In general, human services are about people and the services that they may need at different stages of their life. In particular, they are programs and services that support a safe, healthy community and promote and maintain a good quality of life for citizens.[78]

> While human services include many different services, the expenditure forecasting analysis focuses on:
>
> - income support and social services provided by York Region (e.g. social assistance, social housing, children's services, long term care and seniors community programs);
> - health care (e.g. public health, primary health care, emergency medical services);
> - education (e.g. school boards, Seneca College);
> - transit;
> - police;
> - culture, libraries and recreation; and
> - other community services supported by United Way

4.2 Methodology Used for Expenditure Forecasting

Regression Estimates

The method used to predict 'operating' expenditures for all but two of the above noted human services is regression analysis. The regression analysis methodology used was kept simple in its approach given the high-level objectives of the forecast. Projected population growth (for either the total population or a specific age cohort, depending on the specific program being considered) was the single independent variable used. Therefore, the expenditure levels forecasted are a reflection of future projected population levels. Appendix A provides a detailed explanation of the regression estimation technique and a specific example for the York Regional Police expenditure category.

[78] Human Services Planning Coalition, "Human Services Planning Coalition Charter," November 2006, p.21

There were two program areas where regression analysis was not used. As part of a recent update to its Transportation Master Plan, York Region had developed a ridership model to predict future transit operating expenditures, so those estimates were used in this study. Expenditures for the proposed future hospital in Vaughan were obtained by using the same values as were estimated for York Central Hospital.

With regard to transit, the decision was made to use the expenditure forecasts generated by York Region through their ridership model as it takes into account the significant planned expansion of transit service in York Region. However, given the different methodology used and that the expenditure projections generated for transit are expressed in constant 2006 dollars (and therefore do not include inflation), they are not directly comparable with the projections for the other human service areas which do include inflation. As a result, the report shows the transit projections separate from the aggregated total for the other programs.

Quantitative Data Collection

A request for data was submitted to various representatives at York Region, as well as the nine local municipalities, hospitals, school boards, Seneca College and United Way of York Region. Expenditure data for the study was originally collected in 2007/2008 and updated during the summer of 2009. Some additional verification and updating, where required, was also carried out in the spring and summer of 2010 during the finalization of the report.

Both Regional and external providers of human services were asked to supply 'operating' expenditure data for 1998-2009. As much as possible and within the limitations of this analysis there was an attempt to obtain 'operating' expenditure data that would be comparable across the various categories. In general, there was an attempt to collect "Total Operating Expenditures" excluding contributions to capital/reserves, financing costs, and depreciation/amortization of capital assets. Given the number of different stakeholders being considered and different accounting methods, collecting straight comparables was not possible.

The following provides some additional details with regard to certain expenditure numbers collected/used:

<u>Emergency Medical Services, Public Health, Community Services, Housing and Police</u>: Total operating expenditures were generated by York Region using past actuals for 2001 to 2008 and the approved budget numbers for 2009. While the expenditures exclude contributions to capital/reserves and financing costs they include corporate allocations.

<u>Transit</u>: As noted above, the projection numbers for transit that were used in this report were developed by York Region using a ridership model. The transit projections are based on 2006 actual operating expenditure of $98,844,000 (which is net of Financing Costs & Reserves and Negotiated Specific & Recoveries) as presented in the York Region Business Plan/Budget document.

Local Municipal Culture/Libraries/Recreation: For this sector, total operating expenditures represent the sum of each municipality's total operating expenses shown under the following categories: culture, arts, libraries, parks, recreation and leisure. In many cases, each municipality uses only some of these categories.

Seneca College: The expenditure forecasts for Seneca College are based on the population projections for York Region's 17-22 year old age cohort. Only 20% of Seneca College's total operating expenditures were counted as being directed to York Region, reflecting a best guess that approximately 1/5 of the student body are York Region residents. The 20% estimation is similar to the percentage that was used in the 2000 study (Changing Roles for Human Service Providers and an Economic Analysis of Human Service Costs).

United Way of York Region: The financial figures represent the allocation of dollars to support non-profit human service member agencies and programs in York Region, through the United Way of York Region Community Fund and donor designations.

4.3 Data Limitations

Simplifying assumptions to allow for comparisons across sectors

To provide human service expenditure estimates for future time periods, a number of assumptions needed to be made. (The following assumptions do not apply to the transit forecasts which were generated through a different methodology as noted above.)

1. ***Inflation****:* During the base period (January 1998-September 2009), Ontario's inflation rates were quite stable, with the annual Consumer Price Index increasing by about 2.1%, on average. During the same time frame, public employee compensation in York Region increased at 2-3% annual rates. Depending on the mix of salaries and other costs, each human service provider faced a specific rate of cost inflation. This study implicitly assumes that the rate of inflation experienced by a particular service provider during the base period will continue over the forecast period.[79]
2. ***Efficiency and/or quality changes:*** Similar to the inflation assumption, we presume that whatever the implicit rates of change in service quality and efficiency have been experienced by a specific human services provider during the 1998-2009 base period, will continue for 2011-2031. This is a reasonable assumption given that predicting savings or quality gains would not be possible with any degree of accuracy. Obviously, if efficiency increases at a faster rate in the latter period, slower expenditure growth would result, compared to our projections.
3. ***Service Levels:*** The assumption here is that estimates would be derived using a base period of 1998-2009. Budgetary expenditures during these years are used as a type of "snap-shot" or base for human service programs. Reductions or increases in the different human service program levels or quantities are not projected. While such

[79] For those departments or agencies where data was only available for a shorter time frame (e.g. 2001-2009), the regression models implicitly assume that the inflation rates, efficiency, quality and service levels that prevailed in the shorter base period will continue to prevail in the future.

changes will most likely occur, it would not be reasonable to predict them over a long-term time period. These changes will depend upon many economic and political factors, including the political composition of York Regional Council and the provincial and federal governments of the day.

Client Group Population and Expenditure Estimates

"Client group" populations for the projection of human service expenditures were determined in consultation with York Region and other service providers. A client group is defined as the population cohort most closely related to the service and whose growth is the best predictor of future expenditures (given the study's assumptions). Regression estimates were generated using these client group definitions, as the independent variable. In cases where York Region provided services involved multiple programs, aimed at different client groups and expenditure data could be disaggregated by program, separate regressions were estimated for each of the programs. These separate program expenditures were then aggregated to obtain a total expenditure value for the department or agency. See Appendix Table A1 and A2 for a complete list of the client groups used for estimation purposes.

5. Results and Findings

This chapter provides the key findings of an expenditure review on human services in York Region, based on population data.

5.1 Predicted Expenditures for Human Services Provided by The Regional Municipality of York

Applying the methodology described in Chapter 4, expenditure estimates were generated for human service programs provided by The Regional Municipality of York and for a sampling of other major service providers.

It is important to repeat that the purpose of this expenditure forecast analysis is to get a high level indication of likely cost trends and pressures in the face of continued rapid population growth. In this regard, the statistical methodology used to generate the projections has been kept simple in its approach and considers a single independent variable: population growth.[80] While we know that operating expenditures are impacted by a multitude of factors in addition to population growth, attempting to consider numerous variables is beyond the scope and purpose of this report. Therefore, while the expenditure forecasts can provide insight around general trends and pressures they are not designed to predict precise financial numbers.

Table 5.1 presents a detailed breakdown of the annual operating expenditures for human services directly provided by the Region, on a five year basis for 2001-2031. Data for 2001 and 2006 are actual values, while the subsequent values are estimated using regression analyses with the exception of the transit projections which were generated through a ridership model and supplied by York Region as noted in Chapter 4. As the transit projections were generated using a different methodology and are expressed in constant 2006 dollars (and do not include inflation) they are not directly comparable with the projections for the other human service areas which do incorporate inflation. The table also contains percentage increases in human service expenditures, by category for the previous five year period.

---

[80] As noted in Chapter 4 the Transit projections were generated through a different methodology and provided by York Region.

Table 5.1: Predicted Human Service Expenditures* for The Regional Municipality of York, 2001 - 2031 ($1,000's)

Category of Human Services	2001** Actual	2006** Actual	2011	2016	2021	2026	2031
Projections (2011-2031) are shown in Current Dollar Value and include inflation							
Emergency Medical Service	$17,493	$32,095	$46,7294	$ 63,357	$82,600	$102,357	$118,384
% change-last 5 years	-----	83%	46%	36%	30%	24%	16%
Long Term Care and Seniors Community Programs	$16,868	$29,337	$39,248	$52,462	$71,187	$94,181	$118,843
% change-last 5 years	----	74%	34%	34%	36%	32%	26%
Public Health	$24,295	$44,950	$59,606	$73,632	$86,387	$97,313	$106,760
% change-last 5 years	---	85%	33%	24%	17%	13%	10%
Community Services & Housing* **	$119,255	$ 187,482	$198,245	$236,767	$273,861	$303,381	$324,227
% change-last 5 years	----	57%	6%	19%	16%	11%	7%
Housing subtotal	$31,916	$49,768	$63,980	$76,055	$86,398	$95,192	$103,222
% change-last 5 years	----	56%	29%	19%	14%	10%	8%
Non-Housing subtotal	$87,339	$137,713	$134,265	$160,761	$187,463	$208,189	$221,005
% change-last 5 years	----	58%	-3%	20%	17%	11%	6%
Police	$92,717	$171,115	$239,141	$299,521	$353,141	$400,170	$443,367
% change-last 5 years	----	85%	40%	25%	18%	13%	11%
REGION MUNICIPALITY OF YORK - TOTAL	**$270,627**	**$464,978**	**$582,969**	**$725,739**	**$867,176**	**$997,402**	**$1,111,580**
% change -last 5 years	**-----**	**72%**	**25%**	**24%**	**19%**	**15%**	**11%**
Transit Projections (2011-2031) were generated using a different methodology and are expressed in a 2006 Constant Dollar Value (and do not include inflation). They are therefore not directly comparable with the above projected values.							
Transit****	$30,580	$98,844	$164,305	$317,021	$469,736	$530,368	$591,000
% change-last 5 years	----	223%	66%	93%	48%	13%	11%

Notes:

* Expenditures exclude Contributions to Capital/Reserves and Financing Costs

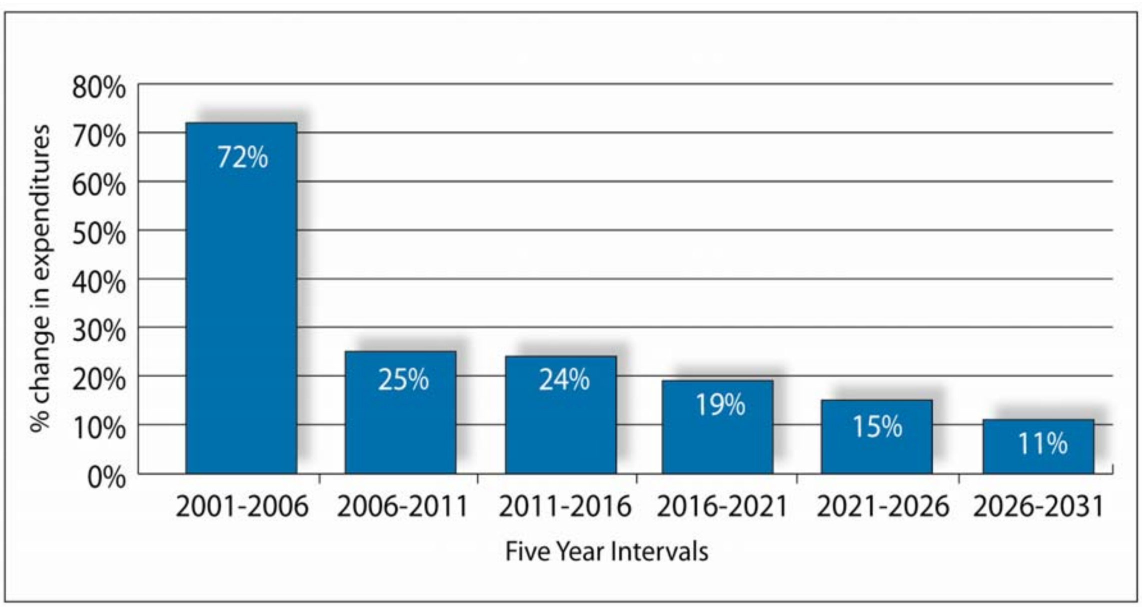
** Data for 2001 and 2006 are actual values

*** The Human Services Collaboration Unit operating budget is included in Community and Housing Services for the entire period. The expenditures as presented do not include payments to GTA pooling of $79.7million in 2001, $92.0million in 2006, and a projected payment of $26.5million in 2011.

****The 2001 & 2006 actual transit expenditures do not include payments to GO Transit. The transit projections were generated through a ridership model and supplied by York Region. The projections, which are based on the 2006 actual expenditure value as presented in the York Region Business Plan/Budget, are expressed in a 2006 constant dollar value and do not include inflation. The transit values shown for 2016 and 2026 were interpolated for this report.

Overall, York Region human services expenditures (excluding transit), based on projected population growth and assuming no radical changes to policies and program management, are projected to grow from the actual value of $271 million in 2001 to $726 million in 2016 and eventually reach $1.11 billion in 2031. As indicated by Figure 5.1, a large portion of that growth has already occurred: by 2006 human services expenditures jumped by 72% (from 2001) to $465 million. Overall, human services expenditure growth (excluding transit) is predicted to be greatest between 2006-2011 and 2011-2016 at about 25% (or a 4.5% annual increase), followed by 2016-2021 at 19% (3.5% annual rate), for each five year interval. Growth in the five year intervals after 2021 (2021-2026 and 2026-2031) could be viewed as somewhat more manageable, being 11-15% over each period (or 2.1% to 2.8% annually, including inflation). When the above is considered in combination with the significant increases predicted for transit expenditure over the next 10 years (shown in Table 5.1) and the realities of the recent recession and provincial government's restraint program, there is little doubt that fiscal strains on the Region will become intense by 2011, and continue at least until 2016, if not for the entire decade.

Figure 5.1: Predicted Percentage Changes in Total Human Services Expenditures (*excluding transit*) by The Regional Municipality of York: 2006-2031, Five Year Intervals



Figures 5.2a and 5.2b highlight the predicted percentage increases in operating expenditures for six specific human service programs provided by York Region, over five year periods from 2001-2031. As was the case for the Region's human services expenditure aggregate, most of the six programs exhibited the largest percentage growth between 2001 and 2006, and will continue to experience substantial growth until 2021, after which growth will moderate. The growth patterns largely mirror the projected population growth rates for the Region.

Figure 5.2a: Predicted Percentage Changes in Emergency Medical Services, Long Term Care and Seniors Community Programs, and Public Health Expenditures (including inflation): The Regional Municipality of York: 2001-2031, 5 Year Intervals

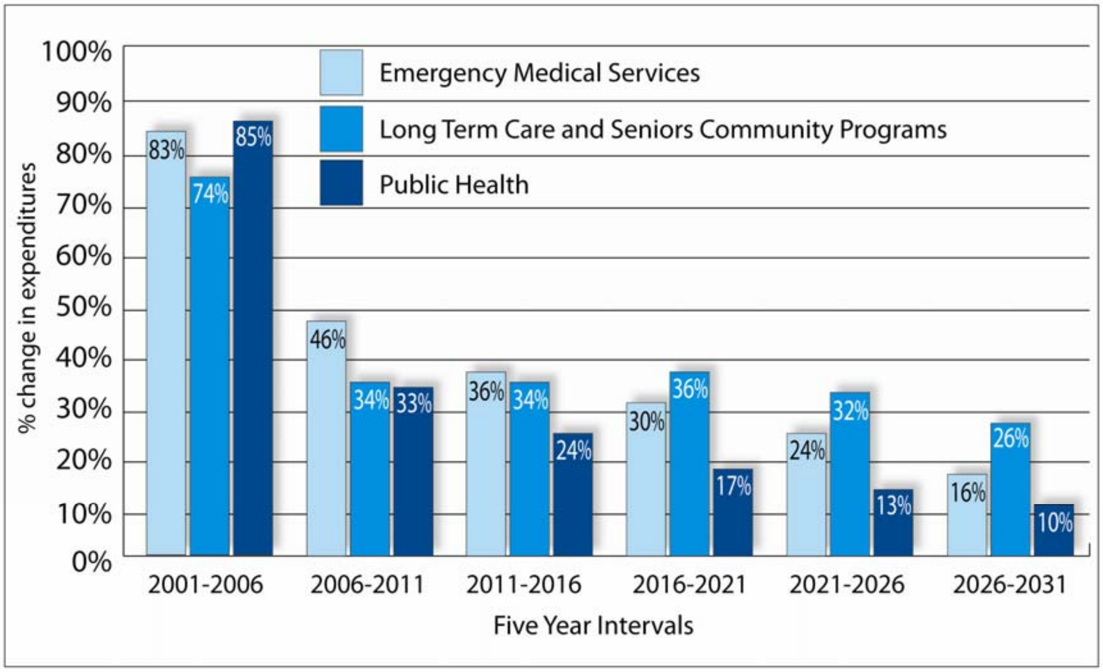
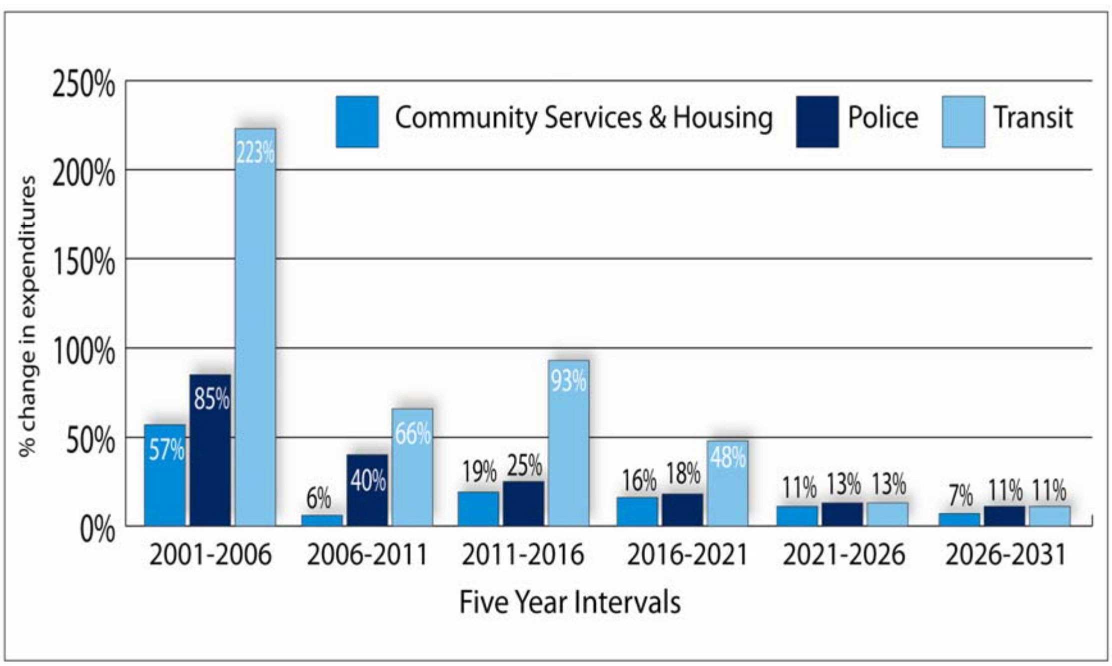


Figure 5.2b: Predicted Percentage Changes in Community Services and Housing, Police and Public Transit Expenditures: The Regional Municipality of York: 2001-2031, 5 Year Intervals (*Note: the % increases shown for Transit exclude inflation whereas the other program areas include inflation*)



Public transit (see Figure 5.2b) is the fastest growing program overall, with a 223% increase from 2001-2006, and predicted increases of 66%, 93% and 48% over the next three five-year periods, before settling down to annual growth rates of about 2.5% after 2021. The dramatic increases until 2021 can primarily be explained by the current and planned expansion of the public transit system within the region. Transit expenditures *(excluding inflation)* are estimated to increase from $99 million in 2006 to $317 million in 2016 and continue to rise to $591 million by 2031.

Long Term Care and Seniors Community Programs, which serve 'graying baby-boomers', are also predicted to increase substantially over the entire period (see Figure 5.2a). Following a 74% increase from 2001 to 2006, expenditures are projected to jump by about 33% in every five year period from 2011-2026. The 26% projected increase for 2026-2031 is twice as large as for any other program for that period. By 2031, expenditure on Long Term Care and Seniors Community Programs is predicted to reach almost $119 million, more than double the $56 million projected for 2016, and approximately four times the $29 million spent in 2006.

A similar, though less dramatic result applies to Emergency Medical Services (EMS). Following an 83% increase from 2001-2006, expenditures climb by at least 30% for the next three five-year periods (until 2021). Rates of increase then decelerate to 24% and 16% for the 2021-2026 and 2026-2031 periods. By 2031, estimated EMS expenditure is more than three times the $32 million spent in 2006.

Although Regional Policing and Community Services and Housing expenditure categories in 2006) are predicted to grow at slower rates, the absolute projected funding requirements will remain substantial. Police expenditures are expected to increase from $171 million in 2006 to $300 million in 2016 and reach $446 million in 2031. Similarly, Community Services and Housing expenditure is predicted to go from $187 million in 2006 to $237 million in 2016, and eventually reach $324 million in 2031. In other words, these two human service programs will require almost $180 million in additional funding by 2016 to maintain the 2006 service level, and another $233 million injection by 2031.

It should be noted that when Community Services and Housing expenditures are divided into housing vs. other social services (see Table 5.1), the projected rates of expenditure increase for each five year period are almost identical, with one important exception. During the 2006-2011 period, housing expenditure is projected to increase by 29%, while spending on other social services is projected to decrease by 3%. The anomaly results, in part, from the fact that all predictions reflect the province's 2010 decision to fully fund the Ontario Disability Support Program (ODSP) (the Region's share of ODSP exceeded $21 million in 2006).

The remaining program, Public Health, is smaller in absolute size and projected to grow at more moderate rates. Expenditures are predicted to increase from $45 million in 2006 to $74 million in 2016 and $107 million in 2031.

Table 5.2 presents the same expenditure data for York Region on a per capita basis. In 2006, the actual per capita expenditure for human services (excluding transit) provided directly by York Region was $499, and it is projected to grow to $605 over the next decade and eventually reach $737 by 2031. With the Region's overall population expected to grow over the entire period, the per capita rates of expenditure increase are consistently lower than total expenditure rates of increase. From 2006 on, the overall (except transit) five year percentage increase for York Region only reaches double digits (11%) for 2011-2016. After 2021, predicted five year increases are 5-7% (or only 1-1.4% annually). The same pattern exists for any of the human services categories. For example, the rates of increase for police expenditure per capita are 22% and 12%, for 2006-2011 and 2011-2016, respectively, which is much lower than the percentage increase in total York Regional Police expenditure over the same periods (40% and 25%). After 2016, the per capita police numbers grow at 4-8% for the three remaining five year periods (compared to 11-18% increases in the total police expenditures).

Are these per capita numbers a better indicator of the affordability of human services expenditures? While the numbers do give a sense that there will be more people in York Region who can potentially share the financial burden of future human services costs, right now The Regional Municipality of York relies primarily on residential and commercial property taxes to fund operating expenditures (including human services).[81] It is not clear how well total population and the total residential and commercial tax base are related. The greater the correlation, the better the per capita expenditures are a proxy of the ability to pay human services expenditures.

[81] In some cases, particularly transit, user fees are also an important source of funding human services.

Table 5.2: Predicted Per Capita Human Service Expenditures* for The Regional Municipality of York, 2001 - 2031 ($1,000's)

Category of Human Services	2001** Actual	2006** Actual	2011	2016	2021	2026	2031
Projections (2011-2031) are shown in Current Dollar Value and include inflation							
Emergency Medical Service	$23.04	$34.44	$43.63	$52.79	$62.83	$72.33	$78.53
% change-last 5 years	-----	49%	27%	21%	19%	15%	9%
Long Term Care and Seniors Community Programs	$22.21	$31.48	$36.64	$43.71	$54.15	$66.55	$78.84
% change-last 5 years	----	42%	16%	19%	24%	23%	18%
Public Health	$32.00	$48.24	$55.65	$61.35	$65.71	$68.76	$70.82
% change-last 5 years	---	51%	15%	10%	7%	5%	3%
Community Services & Housing* **	$157.05	$ 201.19	$185.08	$197.28	$208.31	$214.38	$215.08
% change-last 5 years	----	28%	-8%	7%	6%	3%	0%
Housing subtotal	$42.03	$53.41	$59.73	$63.37	$65.72	$67.26	$68.47
% change-last 5 years	----	27%	12%	6%	4%	2%	2%
Non-Housing subtotal	$115.02	$147.78	$123.35	$133.95	$142.59	$147.11	$146.61
% change-last 5 years	----	28%	-15%	7%	6%	3%	0%
Police	$122.11	$183.62	$223.46	$249.57	$268.61	$282.77	$294.11
% change-last 5 years	----	50%	22%	12%	8%	5%	4%
REGION MUNICIPALITY OF YORK - TOTAL	**$356.41**	**$498.97**	**$544.25**	**$604.71**	**$659.60**	**$704.78**	**$737.38**
% change -last 5 years	**-----**	**40%**	**9%**	**11%**	**9%**	**7%**	**5%**
Transit Projections (2011-2031) were generated using a different methodology and are expressed in a 2006 Constant Dollar Value (and do not include inflation). They are therefore not directly comparable with the above projected values.							
Transit******	$40.27	$106.07	$153.39	$264.15	$357.29	$374.77	$392.05
% change-last 5 years	----	163%	45%	72%	35%	5%	5%

Notes:

* Expenditures exclude Contributions to Capital/Reserves and Financing Costs

** Data for 2001 and 2006 are actual values

*** The Human Services Collaboration Unit operating budget is included in Community and Housing Services for the entire period. The expenditures as presented do not include payments to GTA pooling of $79.7million in 2001, $92.0million in 2006, and a projected payment of $26.5million in 2011.

****The 2001 & 2006 actual transit expenditures do not include payments to GO Transit. The Transit projections were generated through a ridership model and supplied by York Region. The projections, which are based on the 2006 actual expenditure value as presented in the York Region Business Plan/Budget, are expressed in a 2006 constant dollar value and do not include inflation. The Transit values shown for 2016 and 2026 were interpolated for this report.

York Region's human services budget will experience some key shifts in composition by 2031

Figures 5.3 and 5.4 below, show the predicted changes in the composition of the Region's human services budget between 2006 (actual)[82] and 2031. Transit was excluded from this comparison exercise as the 2031 transit expenditure projections are expressed in a 2006 constant dollar value (excludes inflation) whereas the other program area expenditures in 2031 are expressed in current dollar values (includes inflation). There are various key changes that are noteworthy. Long Term Care and Seniors Community Programs, though much smaller in absolute terms than many of the other program areas, is estimated to increase from its 6% share in 2006 to 11% in 2031, reflecting the larger senior citizen demographic. The same is true for EMS which increases its share from 7% to 11% over the 25 year timeframe. Police will also increase its relative share of the human services budget, from 37% in 2006 to 40% in 2031. Community services and housing expenditures are predicted to decrease in relative terms over the same period from 40% to 29%, caused in part by the fact that children and youth, who are major client groups for these programs, are projected to grow at slower rates than the overall population, and the provincial uploading of the ODSP funding responsibility. Public Health's share remains at 10% throughout the same time period. While transit is not shown in the figures below, its relative share of the 2031 human services budget will far outweigh any other area, reflecting the significant planned expansion of the public transit system in York Region.

[82] 2006 was used as the comparison year to maintain consistency with the forecasting analysis which is based on 5 year interval periods.

Figure 5.3: Actual Composition of The Regional Municipality of York's *2006* Human Services Budget (excluding Transit)

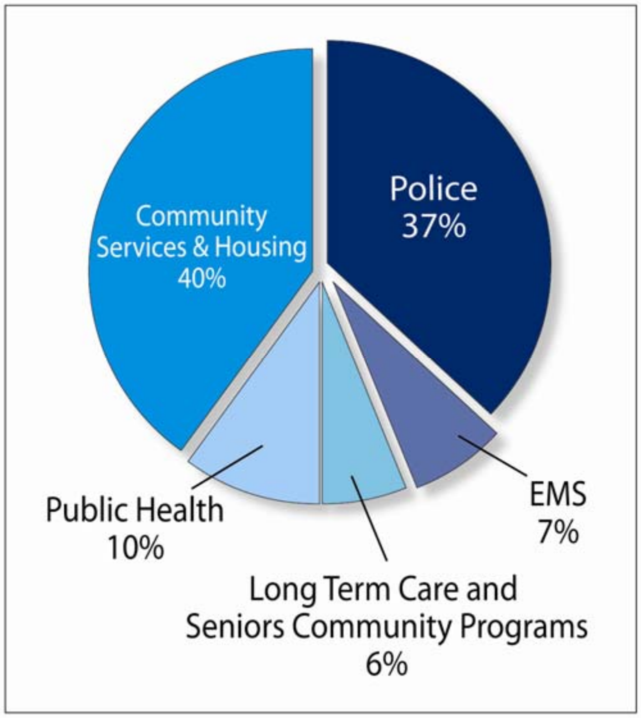
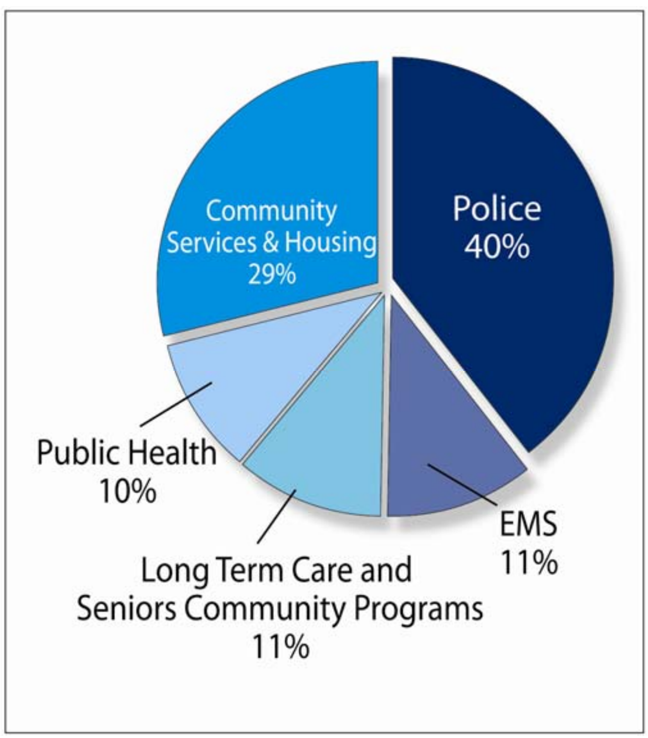


Figure 5.4: Estimated Composition of The Regional Municipality of York's *2031* Human Services Budget (excluding Transit)



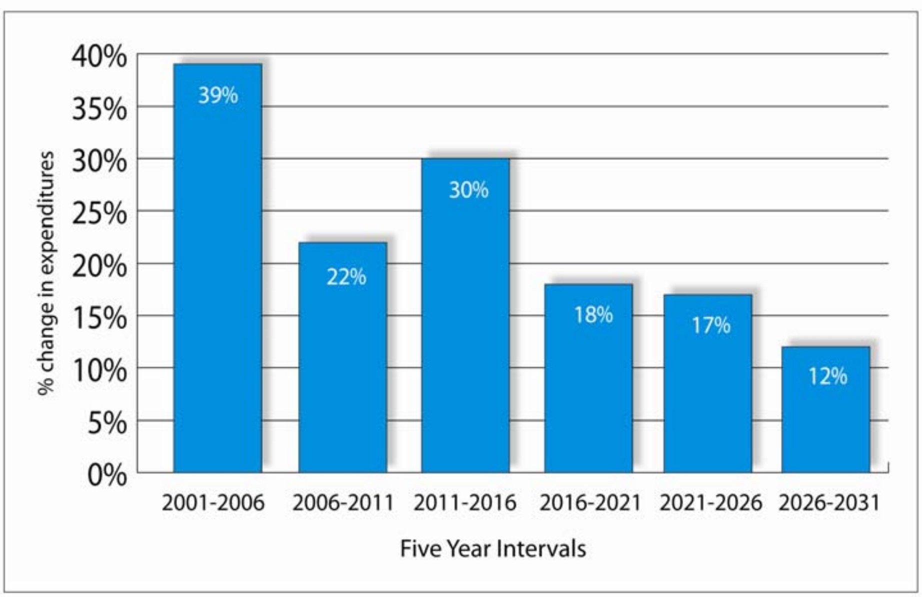
5.2 Predicted Expenditures for Human Services Provided by External Organizations

The total human service expenditures by the external providers examined in this study (i.e. hospitals, school boards, municipal culture, libraries and recreation, Seneca College and United Way) were substantially higher than The Regional Municipality of York's spending. As indicated in Table 5.3, spending in 2006 by these external providers was almost $2 billion, compared to the $564 million of human service expenditures (including transit) made directly by The Regional Municipality of York.[83]

The expenditure increase for the aggregate of external human service providers between 2006 and 2031 is projected to be approximately 147%. In absolute terms, human services expenditures by the external providers are predicted to grow by more than $1 billion between 2006 and 2016 (totaling $3.17 billion), and exceed $4.92 billion by 2031.

Figure 5.5 presents the five year expenditure growth rates for the aggregate of external providers. Following an overall 39% increase in actual expenditures from 2001-2006, the largest percentage rates of expenditure increase are predicted to occur during the 2006-2011 (22%) and 2011-2016 (30%) intervals. Growth rates are estimated to slow in the succeeding five year intervals, at 18%, 17%, and 12%, respectively, largely reflecting somewhat smaller projected population increases in the region in the latter periods.

Figure 5.5: Predicted Percentage Changes in Expenditures for Human Services by Various External Providers in York Region- Aggregated: 2006-2031, 5 Year Intervals



[83] Based on 2009 budgeted expenditures, the total expenditures for human services provided by external agencies are approximately $2.68 billion compared to $0.77 billion for those human services directly provided by the Regional Municipality of York (including transit).

Table 5.3: Predicted Human Services Expenditures* by Various External Providers in York Region, 2001 -2031 ($1,000s)

Human Services Provider	2001**	2006**	2011	2016	2021	2026	2031
Hospitals* **	$289,114	$469,401	$727,743	$1,342,013	$1,760,930	2,191,032	$2,539,940
% change- last 5 years	---	62%	55%	84%	31%	24%	16%
Municipal Culture, Libraries and Recreation	$98,702	$155,214	$198,691	$241,614	$279,866	$313,842	$345,772
% change-last 5 years	----	57%	28%	22%	16%	12%	10%
Public and Catholic District School Boards	$1,005,803	$1,313,485	$1,447,034	$1,518,789	$1.645,481	$1,799,813	$1,960,967
% change-last 5 years	----	31%	10%	5%	8%	9%	9%
Seneca College*****	$38,355	$50,504	$61,021	$61,971	$61,023	$62,710	$66,342
% change-last 5 years	---	32%	21%	2%	-2%	3%	6%
United Way of York Region*********	$3,440	$4,430	$5,853	$7,001	$8,021	$8,915	$9,737
% change-last 5 years	---	29%	32%	20%	15%	11%	9%
EXTERNAL PROVIDERS-TOTAL	**$1,435,414**	**$1,993,034**	**$2,440,341**	**$3,171,389**	**$3,755,321**	**$4,376,312**	**$4,922,757**
% change-last 5 yrs.	**----**	**39%**	**22%**	**30%**	**18%**	**17%**	**12%**

Notes:
* Expenditures exclude Contributions to Capital/Reserves, Financing Costs, and Depreciation/Amortization of Capital Assets and correspond to the organization's fiscal year

** Data are actual values except for the 2001 values for the Town of Markham and York Central Hospital, where the values used to determine the category totals are estimates

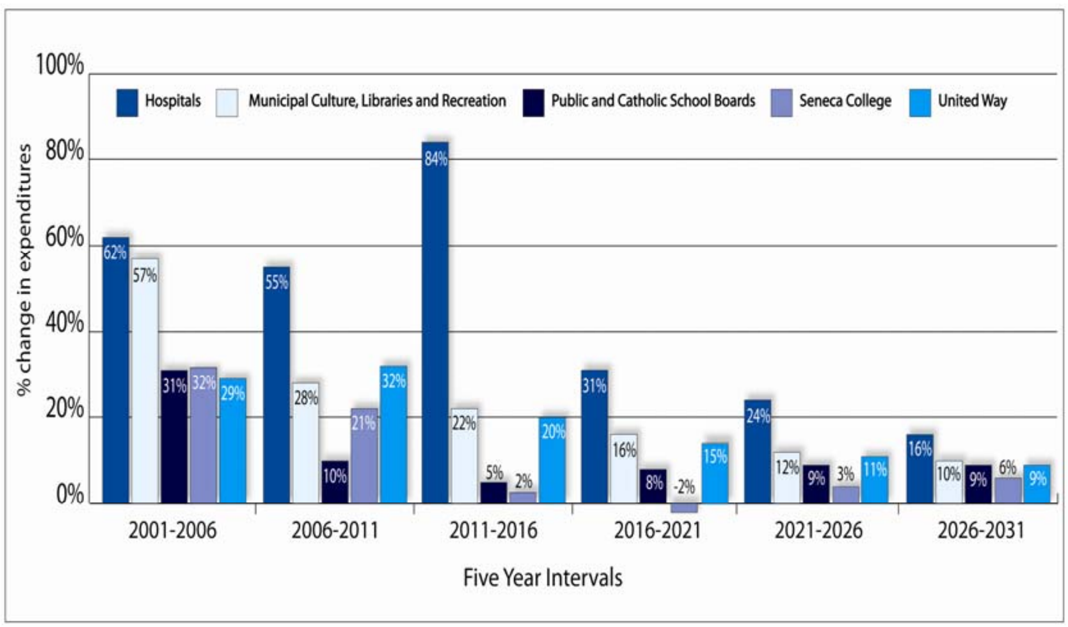
***The future Vaughan Hospital is assumed to be open by 2016 and with expenditures equivalent to York Central Hospital

**** Only 20% of Seneca College's total operating expenditures were counted as being directed to York Region, reflecting the assumption that approximately 1/5 of the student body are York Region residents.

***** Represents total funds for disbursal within York Region

Table 5.2 and Figure 5.6 reveal distinct patterns of expenditure growth among the four external sectors providing human services. Hospital expenditure is projected to grow at, by far, the fastest rate. Following an actual increase from $289 million in 2001 to $469 million in 2006, hospital operating expenditures are predicted to triple to $1.34 billion by 2016 and eventually climb to $2.54 billion by 2031. Growth rates for each five year period exceed 50%, on average, until 2021, after which they fall to 24% and 16% respectively. The projected increases are likely the combined effects of an increasing demand from an aging population, innovations in medical technology and perhaps increases in the level of service.[84]

Figure 5.6: Predicted Percentage Changes in Expenditures for Human Services by Various External Providers in York Region- Disaggregated by Programs: 2006-2031, 5 Year Intervals



The largest sub-group in terms of current spending, Public and Catholic School Boards, is predicted to increase at a slow pace. After an actual increase of 31% between 2001 and 2006 (reaching $1.31 billion), school board spending is predicted to increase at 10% or less in each subsequent five year period. This reflects the modest growth in school age children over the same timeframe. Operating expenditures are slated to reach $1.52 billion by 2016 and $1.96 billion by 2031. It is important to note however that the forecasts for the school boards do not account for the expenditure increases that will be associated with the phase-in of full time kindergarten.

[84] A portion of the expenditure increase occurring between 2011-2016 is predicated on the assumption that a new hospital will open before 2016 to better serve the residents of Vaughan.

Municipal culture, library and recreation expenditures in York Region increased substantially (by 57%) between 2001 and 2006 reaching $155 million. These expenditures are projected to increase by about 55% in the next decade to $242 million in 2016. Growth continues at a slower pace over the next three five year intervals (10%-16% per period), with a final projected expenditure of $346 million in 2031. Higher population growth rates combined with planned expansion of these municipal services probably accounts for the greater actual and estimated expenditure increases from 2001-2016.

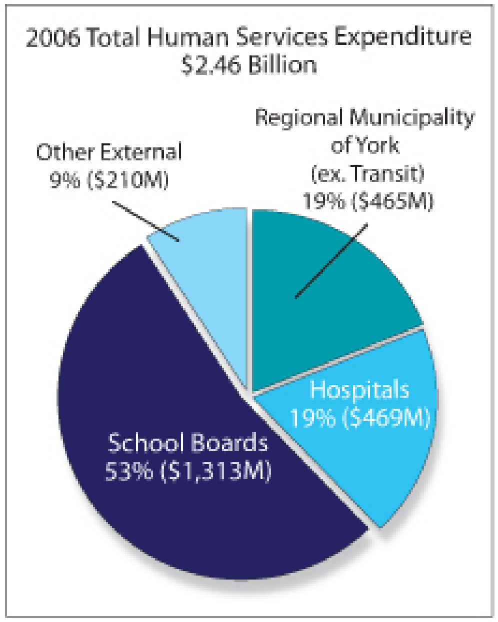
Seneca College's expenditures[85] increased by 32% from 2001 to 2006, and are projected to rise another 21% between 2006 and 2011. After 2011, expenditure growth is expected to be very small, averaging less than 1% annually. In absolute terms, expenditures move from approximately $51 million in 2006 to $62 million in 2016 and reach $66 million in 2031. This pattern can be explained by the very small projected growth rate of the 17-22 year old demographic, the major client group for community colleges.

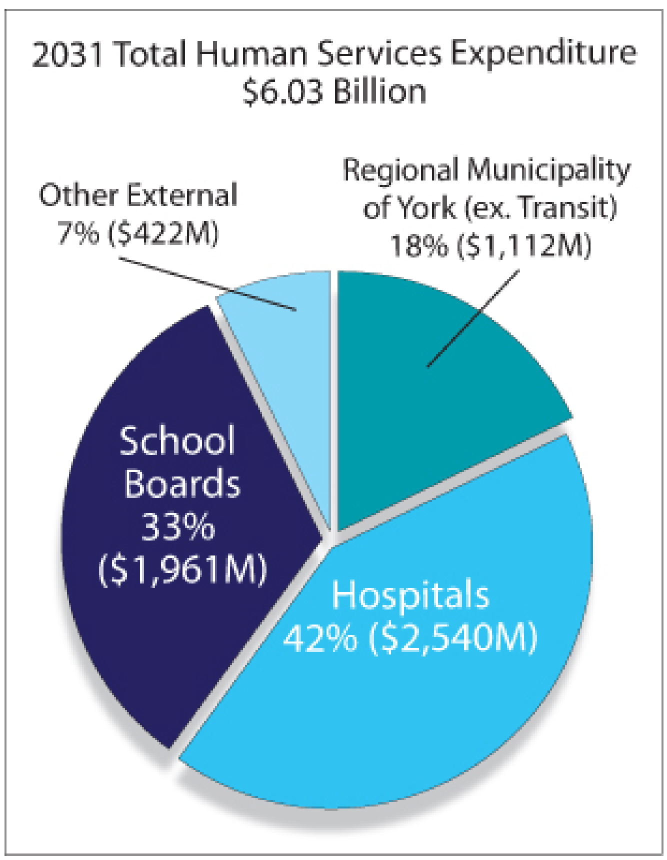
With regard to United Way of York Region, the expenditure forecast analysis focused on the funds raised for disbursal in York Region. This funding increased by 29% from 2001 to 2006, and is projected to rise another 32% between 2006 and 2011. While growth slows over the next three five year intervals, reflecting the slower growth rate in the total population, it remains significant. In absolute terms, the funds increase from approximately $4.4 million in 2006 to $7 million in 2016 and reach $9.7 million in 2031. United Way of York Region is the single largest annual fundraiser in the region; well over 85% of its annual revenue comes from resident, employee and corporate donations with, at the time of this report, no government funding. York Region's population and employment trends provide an opportunity for significant growth in UWYR's local investments in human services.

Figure 5.7 presents the actual 2006 expenditure shares of the major human services providers as well as the projected values for 2031. The pair of pie charts indicate that all four provider groupings (The Regional Municipality of York, hospitals, school boards, and other external) are predicted to spend substantially more on human services in 2031 than they did in 2006. Nonetheless, there are some dramatic changes in relative shares of expenditures between 2006 and 2031. Hospitals' share of total human services expenditures more than doubles from 19% to 42% over the 25 year period, while the school boards' relative share falls from 53% to 33%. The Regional Municipality and other external providers' shares are relatively stable, falling slightly from 19% to 18%, and from 9% to 7%, respectively.

[85] Only 20% of Seneca College's total operating expenditures were counted as being directed to York Region, reflecting the assumption that approximately 1/5 of the student body are York Region residents.

<u>Figure 5.7: Absolute and Relative Composition of Human Services Expenditures by Major Providers (excluding Transit), 2006 and 2031</u>





5.3 Sensitivity Analysis of the Expenditure Projections

As mentioned in Chapter 4, the above projections are implicitly based on a number of assumptions, including service levels, inflation rates and population growth rates. In this section, alternate predictions of human services expenditures are produced, based on a range of inflation and population growth assumptions.

The base case projections assume that departments (or external agencies) will, on average, face the same rate of inflation in providing human services for the 2010-2031 period that prevailed for the 1998-2009 period.[86] For example, suppose that from 1998-2009, the operating costs of an agency providing human services increased by 2.2% annually, solely as a result of higher labour and input costs. The basic model assumes that the department will face the same 2.2% average annual inflation rate from 2010-2031. The basic model's estimates also rely directly on overall and age-specific population projections determined by The Regional Municipality's Planning and Development Services Department, as these numbers are used as the independent variable in the regression. The official forecast for York Region's overall population in 2031 is approximately 1.5 million people.

Based on discussions with officials from The Regional Municipality of York, different assumptions were constructed for both inflation rates in the 2010-2031 period and York Region population growth from 2011-2031. Two inflation scenarios (referred to as "low inflation" and "high inflation") were developed. The low inflation scenario assumes that the average annual inflation rate which will be faced by the human services provider for 2010-2031 will be one percentage point below the actual inflation rate incurred during the 1998-2009 period. The previously mentioned example of a human services provider would now be facing an annual inflation rate of only 1.2% (2.2% - 1%) for 2010-2031. The high inflation scenario assumes that the annual inflation rate faced by a human services provider will be two percentage points above the rate that actually occurred in the 1998-2009 period. In this scenario, the human services provider would be facing an annual inflation rate of 4.2% (2.2% +2%) for 2010-2031.

High and low population scenarios were also constructed. The high-end estimates for York Region population are used from 2011 on, based on a total population of 1.7 million in 2031 (200,000 higher than the official forecast of 1.5 million). Similarly, the low-end population estimates are predicated on a total population of 1.4 million in 2031 (100,000 below the official forecast). In total, there are eight new scenarios, combining all possible inflation and population scenarios: low inflation/low population, low inflation/base population, low inflation/high population, base inflation/low population, base inflation/high population, high inflation/low population, high inflation/base population and high inflation/high population.

[86] In those cases where the expenditure data were only available for 2001-2009, the model implicitly assumes that the average actual inflation rate during this shorter (nine year) period will continue to prevail from 2010-2031.

Table 5.3 provides the projections, under all these scenarios for the total human services expenditures for The Regional Municipality of York and external providers.[87] The top two rows display the base inflation and population case estimates for total expenditures by the Region and external providers, respectively, at five year intervals. The remainder of the table displays total expenditures under all the scenarios, relative to the base case, in percentage terms. For example, in 2016 the base population/low inflation estimate of total expenditures (for both the Region and external providers) is 93% of the 'base case' (or 7% less than 'base case;' expenditures). Similarly, the 2016 estimate for the base population/high inflation scenario is 115% of the 'base case' (or 15% higher than the 'base case').

The first year reported is 2016, because there were miniscule differences among scenarios in 2011 (the inflation scenario differences had only been in effect for one year, and the population scenario differences become operational after 2011).

Table 5.4 demonstrates that the dispersion of estimates for York Region widens in later years. For instance, in 2016, the lowest estimate of total expenditures (low inflation and low population scenario) is 91% of the 'base case' while the highest estimate (high inflation and high population) is 121% of the 'base case' (a range of 30 percentage points). By 2031, the lowest scenario estimate is 75% and the highest estimate is 175% (a range of 100 percentage points), indicating that the estimate dispersion is almost three and a half times as large in percentage terms. These results can be transformed into absolute expenditures, as follows. For services provided directly by The Regional Municipality of York, the 2016 low inflation/low population scenario yields predicted total expenditures of $660 million (.91 X $725.7 million) while the high inflation/high population yields $835 million (1.15 X $725.7 million), a range of $175 million. By 2031, the lowest scenario total expenditure estimate is $834 million (.75 X $1,111.6 million) compared to $1,934 million (1.74 X $1,111.6 million) for the highest scenario, a range of over $1 billion. Similarly, for external providers, the 2016 low inflation/low population scenario yields predicted total expenditures of approximately $2.9 billion (.91 X 3.2 billion) while the high inflation/high population scenario yields $3.7 billion (1.15 X 3.2) billion), a range of $.8 billion. By 2031 the lowest scenario total expenditure estimate is $3.7 billion (.75 X $4.9 billion) compared to $8.5 billion (1.74 X $4.9 billion) for the highest scenario, a range of almost $5 billion. Clearly the expenditure estimates are much more sensitive to changes in the population and/or inflation assumptions, the further into the future that one attempts to predict.

Although only total human services expenditure estimates are reported, because the inflation and population adjustments are uniform across the board, it turns out that the percentage difference between any sub-group's expenditure under a specific scenario and the base case scenario is the same as for the total. For example, in 2016, the high population/high inflation total expenditure estimate is 121% of base case scenario. It is

[87] Separate regressions were estimated using each set of population projections for the low, base and high scenarios. The resulting expenditure predictions were then discounted by 1% annually beginning in 2010 (for the low inflation scenarios), or increased by 2% annually, beginning in 2010 (for the high inflation scenarios).

also true that the 2016 high inflation/high population expenditure prediction on Long Term Care and Seniors Community Programs is 121% of its base case prediction.

Table 5.4: Sensitivity Analysis of the Predicted Human Services Expenditures by The Regional Municipality of York and External Providers, Using Different Population and Inflation Assumptions, 2016-2031

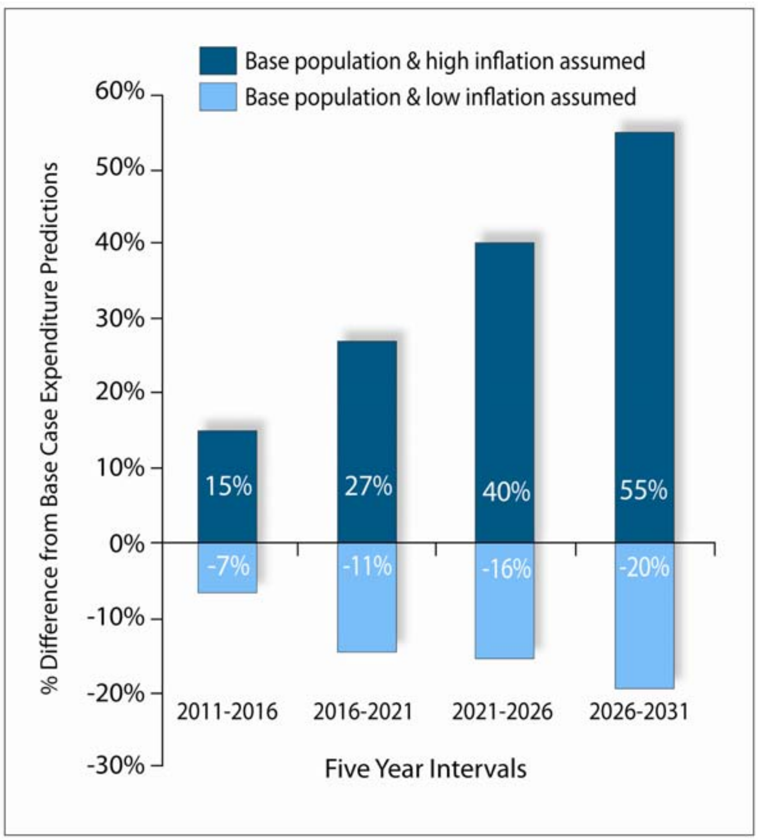
JURISDICTION	**PREDICTED EXPENDITURES ON HUMAN SERVICES RELATIVE TO THE BASE CASE (BASE INFLATION AND POPULATION)* IN $1000'S**			
	2016	**2021**	**2026**	**2031**
REGIONAL MUNICIPALITY OF YORK (EXCLUDING TRANSIT)	**$725,739**	**$867,176**	**$997,402**	**$1,111,580**
TOTAL FOR EXTERNAL PROVIDERS	**$3,171,389**	**$3,755,321**	**$4,376,312**	**$4,922,757**
PREDICTED EXPENDITURES ON HUMAN SERVICES UNDER VARIOUS ASSUMPTIONS, AS A PERCENTAGE OF THE BASE CASE*				
ASSUMPTIONS**	**2016**	**2021**	**2026**	**2031**
BASE POPULATION AND INFLATION	**100%**	**100%**	**100%**	**100%**
BASE POPULATION LOW INFLATION	93%	89%	85%	80%
BASE POPULATION HIGH INFLATION	115%	127%	140%	155%
HIGH POPULATION BASE INFLATION	105%	108%	110%	112%
HIGH POPULATION LOW INFLATION	98%	96%	93%	90%
HIGH POPULATON HIGH INFLATION (HIGHEST OVERALL ESTIMATES)	**121%**	**137%**	**154%**	**174%**
LOW POPULATION BASE INFLATION	97%	96%	94%	93%
LOW POPULATION LOW INFLATION (LOWEST OVERALL ESTIMATES)	**91%**	**85%**	**80%**	**75%**
LOW POPULATION HIGH INFLATION	112%	121%	132%	144%

Notes:
*The base inflation rate for 2010-2031 is assumed to be equal to the actual average inflation rate faced by The Regional Municipality of York from 2001-2009 and by the external providers from as far back as 1998 to 2009.

**The high inflation rate for 2010-2031 is assumed to be 2% per year above the actual rate for 2001-2009. The low inflation rate for 2010-2031 is assumed to be 1% per year below the actual rate for 2001-2009.

Rather than simultaneously dealing with nine scenarios over four time periods, the impacts of inflation and population assumptions on human services expenditures will be addressed separately. Figure 5.8a focuses on inflation, by assuming the base population estimate is correct (1.5 million people in York Region by 2031). If the 2010-2016 average inflation rate faced by human services providers was two percentage points higher than in past, the cost of providing those services in 2016 would be approximately 15% more than predicted in the base case. That amounts to an extra funding requirement of almost $109 million for The Regional Municipality of York (excluding transit expenditures) and $476 million for the external providers. The impact of a continuation of high inflation (two percentage points above the historical level) increases the extra funding required to provide human services by 12-15 percentage points for every five year period. By 2031, the high inflation scenario would require human services expenditures 55% higher than the base forecasts.

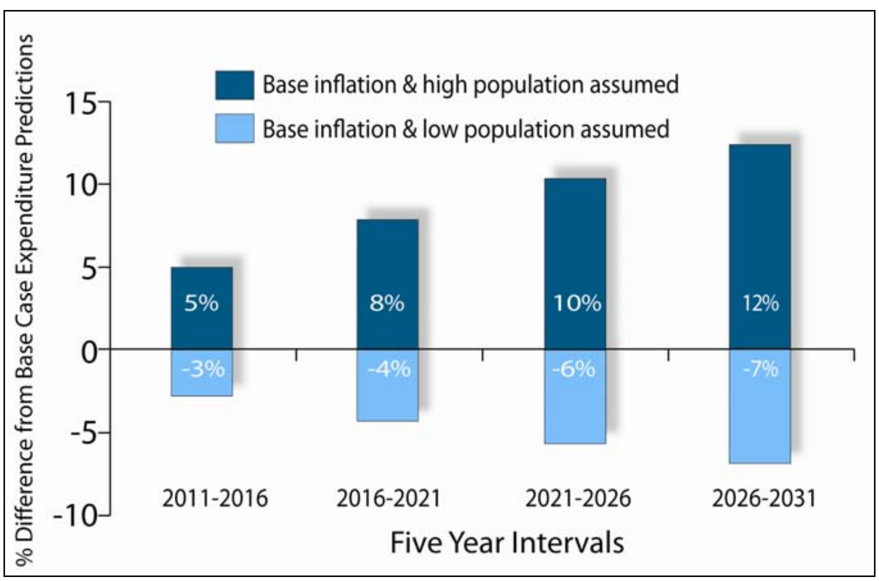
Figure 5.8a: Impact of Varying Only the Inflation Assumptions on Human Services Expenditures: 2016-2031



The logic applies in reverse for the low inflation scenario. Assuming the base population assumption is correct, if the inflation rate facing providers from 2010-2016 was 1 percentage point below the historical average, 2016 expenditures would be approximately 7% less than projected. This would reduce the total funding required by about $51 million for The Regional Municipality of York (excluding transit) and by about $222 million for external providers. The savings associated with a continuation of the low inflation scenario would increase by four to five percentage points for each five year period. If the low inflation rate continued until 2031, projected human services expenditures would be 20% lower than the base case predictions.

Figure 5.8b assumes that the historical inflation rate faced by human services providers will continue so we can investigate the impact of varying rates of population growth. The high population scenario assumes that York Region's population grows at a faster rate from 2011 to 2031, so that total population reaches 1.7 million by 2031. In this situation, 2016 human services expenditures would increase by approximately 5% more than originally forecast; or about $36 million for The Regional Municipality of York and $159 million for external providers. The cumulative impact of this higher population growth adds about two to three percentage points for every five year period, with 2031 expenditure estimates exceeding the base case projections by 12%. Similarly, under the low population scenario, where the 2011-2031 growth rate leads to a total of 1.4 million people, human services expenditures in 2016 would be about 3% lower than the original predictions. By 2031, the expenditure estimate would be 7% below the original projections.

Figure 5.8b: Impact of Varying Only the Population Assumptions
Human Services Expenditures: 2016-2031



6. Recommendations

This chapter considers policy options on managing human service expenditures in The Regional Municipality of York over the next 20 to 25 years.

The Regional Municipality of York has made tremendous strides in the last few years in enhancing human services. Just a few examples include:

- expanding the Community Development Investment Fund
- establishing the New Agency Development Fund
- incorporating a comprehensive set of human services policies within the updated Official Plan
- approving two Accessibility Plans making York Region's programs, services and facilities more accessible to people with disabilities
- establishing and funding a variety of innovative affordable housing programs and services as well as completing/commencing construction on a number of affordable housing communities
- creating new convalescent program beds
- opening a new emergency shelter for homeless families
- approving the Eviction Prevention Assistance Program
- introducing a performance measurement system for Public Health programs and services
- establishing the new Human Services Planning Board of York Region
- establishing a Special Response Unit, a partnership between EMS and police, that offers specialized medical care in high-risk emergency calls
- starting work on a made-in-York Region Immigration Settlement Strategy
- starting the development of a Community and Health Service's Department Multi-Year Plan
- providing emergency support to individual food banks
- introducing additional funding to support the sustainability of York Region's emergency shelter system
- enhancing family strengthening programs to include special needs children and youth
- the continuation and introduction of a number of initiatives by York Regional Police around youth engagement and cultural diversity, etc.

Based on the analysis of this study, it is proposed that The Regional Municipality of York consider the following four broad recommendations. It is noted that while these recommendations were developed for The Regional Municipality of York, many are applicable across the broader human services sector. These broad recommendations focus on planning, investing, managing and delivering, data monitoring, and evaluation of human services in York Region over the next 20 to 25 years. We conclude this chapter and report with a brief discussion on emerging issues and areas of uncertainty that must be kept in mind as the planning process unfolds.

6.1 Collaborative Planning

As explored in this report, it is clear that human services are interrelated and that developments or changes in one human service will have impacts on others. The Region cannot rely on plans that are insulated from one another. Rather, this points to the need for integrated, comprehensive and collaborative planning on four levels.

1. **Within the York Region government:** Recent initiatives on growth management and sustainable planning are examples of how the Region is trying to make strategic connections among its human services (e.g. social housing, police, etc.) and to other "hard services" (e.g. waste and water). This requires further efforts to develop strategies for the Region's various departments and branches to work more closely together through partnering, sharing knowledge and lending skills to effectively plan for human services.

2. **Inter-governmentally:** The programs and policies of other governments can significantly impact the Region's human service planning. Examples include federal immigration policies and provincial decisions with respect to down/up loading service responsibilities. To be in a better position to anticipate or react, the Region should more actively pursue formal and informal mechanisms with the federal and provincial governments for knowledge and information sharing.

3. **Across the broad human service sector:** By the same token, the Region can benefit from working more actively to understand the challenges, needs and plans of other service providers by bringing them more centrally into the Region's planning process. It is noted however, that this is definitely a two-way street between the Region and the broader human services sector.

   While the Human Service Planning Coalition was a useful forum for information sharing, its successor the Human Services Planning Board of York Region (HSPB–YR), should invest effort into understanding the organizational planning of service providers. For instance, how are the strategic plans of York Region school boards, grant providers, hospitals, etc. reflected in one another's planning?

   This will involve listening to, recognizing and applying ideas and innovations from service providers. For instance, the Region (through HSPB) could host an annual human services retreat/meeting where key partners can discuss their respective challenges, accomplishments, and commitments and how they relate to one another. To document the links between the planning processes, the Region might commit to presenting to Council on its efforts to align its priorities with those of its partners. Similarly, partners (e.g. school boards, hospitals, voluntary sector funders) might discuss priority links during meetings with their Board of Directors or other advisors (e.g. Annual General Meetings). Regional staff, where practical, should be responsive to invitations to participate in meetings organized by their human service partners. Such actions will promote mutual accountability and shared learning. This may lead to more effective and efficient planning of human services in York Region.

4. **With Citizens and Communities:** Formal processes and mechanisms for involving citizens and communities in the planning of human services in York Region could also be explored. Engaging citizens more often in the planning process may lead to several benefits. First, the Region can make better use of community knowledge and resources, value community insights, and can enhance the capacity of communities to plan and make decisions about their own futures. Second, complex challenges cannot be solved with a few people, looking at a few issues. Involving citizens can lead to more holistic, appropriate and responsive services and programs. Third, engaging citizens and communities can foster a sense of shared ownership and responsibility for solutions.[88]

6.2 Investing

Analysis from this study suggests that the Region needs to take at least three critical actions to invest in human services.

1. **Invest Early:** Given that many service areas will experience the strongest growth pressures over the next 10-12 years, there is some urgency to ensure that relevant and appropriate funding formulas are in place. We recommend that the Region continue with the planning processes it has underway, while being mindful to set firm time targets.

2. **Provincial Funding:** As mentioned in Chapter 3, there is quite a bit of uncertainty about planning operational budgets due to the reliance on provincial and federal funding. The Region should advocate for senior levels of government to provide predictable and secure multi-year funding arrangements, wherever possible. As a starting point, it might be useful to reflect upon the implications and opportunities for different funding cycles. The case might be more compelling (and the senior levels of government might be more receptive) if the human service providers "speak with one voice". The Region might play multiple roles as a convener, advocate and negotiator in these discussions.

3. **Supporting Community Agency Partners:** The Regional Municipality of York's 2008 budget allocated $500,000 annually for a New Agency Development Fund that will address capacity building and service delivery enhancement of qualifying agencies. In addition, Council approved enhancements to the Community Development Investment Fund (in September 2008) to make multi-

[88] For a discussion on citizen involvement in the policy process, see Phillips, Susan with Michael Orsini. "Mapping the Links: Citizen Involvement in Policy Processes," *CPRN Discussion Paper* No. F21, April 2002.

year (up to three years) funding available to agencies contingent upon their achieving annual targets and objectives (along with several other criteria). These are extremely positive steps, which among a few others, transfer funding with Regional oversight into the hands of community agencies.

York Region also understands the value of non-financial supports. York Region established and is a member of the York Region Funder's Alliance, a network of national, provincial and regional funding bodies operating in York Region. Through funders' forums, proposal writing and other workshops, the Alliance helps York Region-based non-profits and charities obtain funding. Further, funding recipients under the New Agency Development Fund are provided with training around effective governance and strategic planning.

It is recommended that the Region continue to enhance the capacity of human service organizations (especially smaller, less developed agencies) through both financial and non-financial supports. With regard to non-financial supports, the Region (through the HSPB-YR) could develop various training/workshop opportunities to help strengthen the skill and knowledge capacity within the broader human services sector (e.g. leadership training).[89] While forward-looking, such programming may support problem-solving on current human service challenges.

6.3 Managing and Delivering

An essential element of the Region's responsibilities lies in the management and the actual delivery of services to clients and communities—whether as a provider or partner. It is important to recognize that building sustainable communities should not be seen as a fixed target, but rather an agenda for change. This may involve four interrelated approaches:

1. **Alternative Service Models:** Given the pressures on human service expenditures, particularly over the next 10-12 years, the Region may want to consider options for additional costing for staffing as well as increased reliance on service delivery through arrangements with the voluntary, community and/or private sectors (as is already done to a large extent for housing). This may lead to a shifting of responsibilities of current staff toward providing more support, research and expertise on human services. Additional forms of revenue generation such as public-private partnerships may also be explored. The Region could undertake a rigorous cost-benefit analysis, including feasibility and risk assessment components, prior to expanding such service models.

[89] A particularly innovative model can be found in the United Kingdom's Academy for Sustainable Communities.

2. **Service Integration:** People live and work in communities and places, not sectors or categories. Citizens need convenient access to services and clear and simple pathways to find the services they need. In the "back of the store", it is essential that the Region demonstrate even more leadership, strategy building and innovative thinking.

   At the "front of the store", the Region should continue to develop single-window service mechanisms to provide information to clients about how to access services. The Region could continue to explore both physical and virtual arrangements for "single-window" access. The former might include arrangements such as resource centres and mentors, supports for specific segments of the population (e.g., Welcome Centre for Immigrants), and place-based approaches so that citizens can easily access a variety of services in the municipalities in which they live. Locating services close to major transit nodes is a prime example. Virtual single-window arrangements might include electronic service mapping and portals so that clients of one program are automatically assessed for their eligibility for other related services.

3. **Prevention:** There is mounting evidence that investments in prevention and early intervention are showing significant returns. A number of examples can be citied. An assessment of the impact of Pathways to Education, an early intervention program[90] in Regent Park in Toronto, estimates a present value of the social benefit of the program to be $50,000 per student[91,92]. A variety of studies show a significant rate of return on investments made in child care for low income populations, ranging from $4 to $16 for each dollar invested[93]. A recent report published by Dr. Charles Pascal on *Early Years Education* goes so far as to estimate the net reduction in health care costs as a result of better education starting from a young age on an order of magnitude in the millions to billions[94]. The University of Toronto calculates a 2:1 return-on-investment for child services (such as formal schooling and integrated education)[95]. Ypsilanti, Michigan has tracked the cost-benefits of high-quality preschool programming for 40 years with a return of $17 per $1 invested – those receiving higher quality preschool education "were more likely to hold a job, had committed fewer

---

[90] From the Pathways to Education website: "The [program] is a proven effective model, first created and implemented in Regent Park by the Regent Park Community Health Centre. Our Mission is to ensure that young people from at-risk and/or economically disadvantaged communities achieve their full potential by getting to school, staying in school, graduating and moving on to post-secondary programs."
[91] Ontario Association of Food Banks. The Cost of Poverty: An Analysis of the Economic Cost of Poverty in Ontario. November 2008.
[92] Ministry of Children and Youth Services. Breaking the Cycle: Ontario's Poverty Reduction Strategy. Published in 2009. Accessed from http://www.ontario.ca/breakingthecycle on August 8, 2009.
[93] Charles Bruner. State Early Childhood Policy Technical Assistance Network. Happy Returns: Three Economic Models that Make the Case for School Readiness. Published December 2004. Accessed from http://www.finebynine.org/uploaded/file/SECPTAN_MHR_final.pdf on October 4, 2009.
[94] Pascal, Charles. With Our Best Future in Mind. June 2009.
[95] Pascal, Charles. With Our Best Future in Mind. June 2009.

crimes, and were more likely to have graduated from high school than adults who did not have [this] preschool."[96,97].

The Region and its partners believe in the importance of prevention, and have focused the management and delivery of human services on identifying root causes of problems, rather than simply addressing symptoms. Examples include: prevention strategies for target populations such as early intervention referrals for children with special needs; a variety of projects sponsored through community investment funding; West Nile virus infection prevention; a focus on chronic disease prevention in the 2010-13 Health Service Plan of the Central LHIN, etc. These and other initiatives are to be applauded. York Region should advance even further and more comprehensively with prevention strategies and approaches in line with the collaborative planning approaches outlined in 6.1.

4. **Urban Intensification:** Human services planning and management should keep in the forefront not only the impacts of intensification on service delivery costs (which may not be highly significant), but also considerations of costs and convenience facing residents who consume these services. We encourage the Region to continue thinking about the trade-offs and potential opportunities that intensification may bring to human services, not only for cost implications but other factors as well (e.g. accessibility for low-income households). We recommend that the Region not only think about the design of human services in an increasingly urban form (e.g. one-stop community service delivery and/or locating services along transit corridors), but also how those services will be managed. This combination will ensure that York Region will not only be well designed and built, but also well connected and well served. Finally, we encourage the completion of full cost-benefit analyses of alternative sites being considered for service facilities. These analyses would look beyond the current budget implications and also consider the socio-economic benefits to the clients. While a site in a Regional centre may cost more to purchase/lease than one outside the centre, the benefits to clients and savings realized in other areas may far outweigh the costs.

6.4 The Importance of Data Monitoring and Evaluation

We would like to make two final suggestions to reiterate the importance of monitoring and evaluation.

1. **Data Collection:** There has been a significant and highly positive trend towards better data collection since the last study on human service expenditures in 2000.

[96] Pascal, Charles. With Our Best Future in Mind. June 2009.
[97] Lawrence J. Schweinhart, Jeanne Montie, Zongping Xiang, William S. Barnett, Clive R. Belfield, and Milagros Nores. Lifetime effects: The High/Scope Perry Preschool study through age 40. Ypsilanti: High/Scope Press, 2005.

York Region has shown its commitment towards demographic and trend analysis through its participation in the Community Social Data Strategy initiative[98]. In 2005, the Region formed York Region's Consortium for the Community Social Data Strategy. Members of the York Region Consortium include:

- The Regional Municipality of York (Lead Consortium member)
- United Way of York Region
- York Regional Police
- York Catholic District School Board
- York Region District School Board

York Region's Consortium worked collaboratively with the community stakeholders through a Community Reference Group to identify research needs, advise on practical application of research as well as providing a means to share research with the community at large. As part of this initiative and to get a better sense of the trends coming out of the 2006 Census, York Region produced a number of fact sheets *"Just the Facts About Your Community"* (based on the 2006 Census) that provided a high level overview on the following topics:

- Housing and Shelter Costs in York Region
- Diversity of Residents Living in York Region: Employment and Income
- Diversity of Residents Living in York Region: Ethnic Origin and Visible Minorities
- Diversity of Residents Living in York Region: Immigration and Mobility
- Languages of Residents Living in York Region

These fact sheets were made available online and distributed to community stakeholders through various networks.

It is recommended that these achievements be continued and enhanced further through central policies mandating data collection and performance measurement at a more local level if possible. In addition, it would be helpful if data on expenditures of other service providers (e.g. school boards, hospitals, grant providers) were collected and tracked on an annual basis. This would allow the Region to maintain a broader picture of human service expenditures, help in comparisons and trend analysis, and provide independent evaluators with more support to conduct related studies. In addition, such measures will enable the Region to support elected officials to make informed, evidence-based decisions

[98] The community Social Data Strategy is a national initiative of the Canada Council on Social Development in which 16 communities across Canada purchase custom Census data from Statistics Canada for community planning. The goal of the CSDC is to share data as broadly as possible with community agencies that could not otherwise afford this type of data through collaborative partnerships between municipal governments and community stakeholders.

and to provide greater transparency about the cost of human services in York Region.

2. **Service Standards:** In collaboration with its partners, the Region could consider developing ways to capture better data on service delivery. This may involve identifying meaningful indicators at the Region and across sectors and putting in place mechanisms to collect and share current real time data that allows for programs and service delivery to respond to changes and trends more rapidly. In addition, the Region might consider data collection strategies to measure the quality of services and programs, which is becoming increasingly important to clients, regulators and taxpayers.

In the coming years, York Region will face major challenges as the pressures of rapid population growth and changing urban structure continue to unfold. York Region has, in recent years, taken major steps forward in its planning processes and in its coordinating efforts with external service partners. Acting on the recommendations in this report will help to put the Region in an even stronger position to deal with the coming challenges and to take advantage of the potential opportunities. On the other hand, failing to strengthen the Region's and its partners' planning capacities will increase the difficulty of dealing effectively with future growth and planning future development.

6.5 Emerging Issues and Uncertainties

The projections in this study should be read as approximations of trends, not as absolutes. As with any projection or forecast, as events unfold actual values could (and usually will) deviate from forecast values. The approach in this study has been conservative; that is, for the most part the risk is that actual values will be higher than the projections. Several factors (some of which have already been flagged earlier in this report) could influence the trend of future human service expenditures differently, namely:

- **Inflation** – Assuming that the inflation rate experienced by a particular service in the base period (1998-2006) will continue throughout the projection period is conservative. It is more likely that any deviation from this will be towards higher inflation rates rather than lower. If so expenditure growth will be higher (as suggested in the sensitivity analysis) than our projections and/or service gaps (e.g., wait lists) will grow.

- **Demography** – The forecast models use population projections provided by the Region. Other than the projections for total population growth, there are two areas in particular where deviations from demographic forecasts could have significant impacts on expenditures. If the population of seniors, and especially of "senior seniors (75+)", increases more rapidly than forecast, some human service expenditures will grow more rapidly than forecast. Health service, long term care and seniors community program expenditures would be particularly affected. Second, if population diversity increases more rapidly (for example as a result of higher immigration levels) selected service areas may experience higher demand pressures. Again the sensitivity analysis provides some indication of the magnitudes.

- **Intensification** – Increased intensification in urban growth patterns may increase the land cost component of some services such as social housing. Simultaneously, the demand for social housing could increase if affordability of private-market housing becomes more of a problem. It is worthwhile to reiterate that our projections do not incorporate these effects; the projections implicitly assume that intensification levels in the forecast period will continue those of the base period.

- **Other governments** – These projection models imply an accommodating stance by the provincial and federal governments. It assumes existing policies affecting regional human services will not change (except for the end of GTA pooling which we have accounted for) and that grants and other financial support will be forthcoming at the same proportionate rates as is currently the case. If relative grant levels increase (or provincial expenditures replace regional costs as in the uploading of social assistance benefits) expenditures are likely to grow more rapidly than we project (which could contribute to narrowing service gaps). Alternatively, if financial support becomes relatively tighter, the Region will experience increased pressures to generate its own revenues and service gaps may well become more severe.

- **Capital expenditures** – While the goal was to estimate growth in operating expenditures for human services, it is clear that other expenditure pressures will develop for capital investments. While these will be present in virtually all service areas, they will be particularly large in areas such as transit, social housing, and long term care. The Region should consider undertaking a separate study of the human services capital investment program that will be required over the next 20 - 25 years and the implications for its human service operating budgets.

- **Excess demand:** The projections in this report implicitly assume that service levels relative to demand will remain the same throughout the projection period. This raises questions of unmet or excess demand. Defining and measuring these excess demands may be worth exploring. In some cases, official wait lists exist but they may or may not accurately capture the true picture. For example, wait lists for social housing are maintained, but given the lengthy wait times, many individuals and families do not bother putting their names on the lists. It might be worth exploring survey techniques or modeling exercises to develop accurate pictures of unmet demands for a variety of human services.

Sources Consulted

Behan, K. M. Maoh, P. Kanaroglou. "Evaluating Smart Growth Strategies with Simulations: Evidence from Hamilton, Ontario." Centre for Spatial Analysis, 2007.

Browne, Gina, Jacqueline Roberts, Amiram Gafni, Carolyn Byrne, June Kertyzia, and Patricia Loney. "Conceptualizing and validating the human services integration measure," International Journal of Integrated Care, Vol. 4, May 2004.

Brunet, Alexia, Larry DeBoer, Kevin T. McNamara. "Community Choice between Volunteer and Professional Fire Departments." Nonprofit and Voluntary Sector Quarterly 30 (2001): 26-50.

Burton, Elizabeth. "The Compact City: Just or Just Compact? A Preliminary Analysis," Urban Studies, Vol. 37, Number 11, 2000.

City of Edmonton. Smart Choices for Developing Our Community. Edmonton: City of Edmonton, 2004. http://www.edmonton.ca/InfraPlan/SmartChoices/Documents/Recommendations%202004.pdf

Clutterbuck, Peter and Rob Howarth. "Toronto's Quiet Crisis: The Case for Social and Community Infrastructure Investment." Research Paper 198. 2002.

Conference Board of Canada. Mission Possible: Successful Canadian Cities. Ottawa: Conference Board of Canada, 2007. http://www.urbancentre.utoronto.ca/pdfs/elibrary/ConfBdCda_Successful-Cdn-Cities_2007.pdf

Cullen, Alice Jane. Urban Intensification and Affordable Housing in Auckland. Master's Thesis. Dunedin: University of Otago, 2005. http://www.chranz.co.nz/pdfs/urban-intensification-and-affordable-housing-in-auckland.pdf

Daniels, Tom. "Smart Growth: A New American Approach to Regional Planning." Planning Practice and Research 16.3 (2001): 271-279.

Forsyth, Ann, Michael J. Oakes, and Kathryn H. Schmitz. "Does Residential Density Increase Walking and Other Physical Activity?" Urban Studies 44.4 (2007): 679-697.

Gurin, David. Understanding Sprawl: A Citizen's Guide. Vancouver: David Suzuki Foundation, 2003. http://www.urbancentre.utoronto.ca/pdfs/elibrary/Suzuki.pdf

Handy, S. "How the built environment affects physical activity: Views from urban planning." American Journal of Preventive Medicine 23.2 (2002.): 64-73.

Hilton, Robert and Christopher Stoney. "Why Smart Growth Isn't Working: An Examination of Ottawa's Failure to Deliver Sustainable Urban Transit." n.d.

Hirschl, Thomas A. and Mark R. Rank. "Community Effects on Welfare Participation." Sociological Forum 14.1 (1999).

Ladd, Helen F. "Population Growth, Density and the Costs of Providing Public Services." Urban Studies 29.2 (1992): 273-295.

O'Toole, Randal. "The Folly of "Smart Growth"." Regulation 24.3 (2001): 20-25. http://www.cato.org/pubs/regulation/regv24n3/otoole.pdf

Peel Fair Share Task Force, Social Services Funding for Ontario and GTA/905, 2002-2003, 2003-2004, 2005-2006, 2006-2007.

Phillips, J. E. Goodstein. "Growth Management and Housing Prices: The Case of Portland, Oregon." Contemporary Economic Policy 18.3 (n.d.): 334-344.

Phillips, Susan with Michael Orsini. "Mapping the Links: Citizen Involvement in Policy Processes," *CPRN Discussion Paper* No. F21, April 2002.

Rank, Mark R. and Thomas A. Hirschl. "The Link Between Population Density and Welfare Participation." Demography 30.4 (1993): 607-622.

Regional Municipality of York. Human Services Planning Coalition Charter, November 2006.

Regional Municipality of York, "A Profile of the Region's Low Income Population: Research Highlights," 2004.

Regional Municipality of York, "Community Snapshots: Recent Immigrants Living in York," n.d. http://www.york.ca/Departments/Community+Services+and+Housing/rep orts.htm

Regional Municipality of York, Regional Tax Levy Budget, Dated November 23, 1998.

Regional Municipality of York, 2000 Budget Gross and Net by Branch, Dated January, 18, 2000 (Gross 1999 Budget, 1999 Data).

Regional Municipality of York, 2001 Budget Gross and Net by Branch, (Gross 2000 Operating Budget, 2000 Data).

Regional Municipality of York, data directly from departments:

a) 2001-2006 Data for Police, Natural Environment and Transit
b) 2001-2007 Data for EMS, Long Term Care and Seniors Community Programs, and Public Health Programs
(Corporate Allocations Excluded)

Regional Municipality of York, Data for Social Assistance, Family and Children Services, Housing and Human Services Planning: Annual Tables.

Regional Municipality of York, Gross Expense, Revenue and Net Levy by Regional Department Budget, Restated Expenses (2002 Data).

Regional Municipality of York, Gross Expense, Revenue and Net Levy by Regional Department Budget, Restated Expenses (2003 Data).

Regional Municipality of York, Gross Expense, Revenue and Net Levy by Regional Department Budget, Restated Expenses (2004 Data).

Regional Municipality of York, 2005 Budget, (2003 Data).
(Data excludes allocations)

Regional Municipality of York, Operating Business Plans and Budget, 2008 (Data for 2005-2011, unless provided directly by department/agency).

Regional Municipality of York, Operating Business Plans and Budget, 2006.

Regional Municipality of York, Terms of Reference, Consulting Services for the Human Services Planning Branch.

Regional Municipality of York, Backgrounder, LTC Funding and Staffing Issues, n.d.

Regional Municipality of York, Web site, http://www.york.ca/default.htm, accessed January 2008-April 2008.

Saelens, Brian E., James F. Sallis, and Lawrence D. Frank. "Environmental Correlates of Walking and Cycling: Findings from the Transportation, Urban Design, and Planning Literatures." Annals of Behavioral Medicine 25.2 (2003): 80-91.

Town of Newmarket, News Release, June 15, 2006 (http://www.newmarket.ca/userfiles/HTML/nts_1_3341_1.html).

Williams, DeEdgra Washington. "The Impact of Population Density and Racial Composition on Municipal Government Expenditures." Dissertation Abstracts International, A: The Humanities and Social Sciences 67.08 (2007): 3093.

"The Impact of Pouplation Density and Racial Composition on Municipal Government Expenditures." PhD Thesis. 2006. http://etd.lib.fsu.edu/theses/available/etd-07102006-202025/unrestricted/dww_dissertation.pdf

Williams, Katie. "Urban intensification policies in England: problems and contradictions." Land Use Policy 16.3 (1999): 167-178.

Appendix A – Explanation of Regression Analysis

This appendix provides a general explanation of regression estimation techniques as well as working through a specific example for the York Regional Police expenditure category.

The first step is to estimate the relationship between total expenditure on a specific human service (the dependent variable) and the appropriate population aggregate (the independent variable), for those years where data are available. The actual population independent variable depends on whether the type of service is aimed at the overall public (in which case, total York Region population would be used), or at a specific demographic group (i.e. for primary and secondary education we used population 4-18 years old). It is reasonable to expect that the relationship between the human services expenditure and the appropriate population aggregate can be approximated by an upward sloping straight line, as follows:

$Exp_t = a + b\ Pop_t$ where:

Exp_t = expenditure on human service in year t

Pop_t = population aggregate in year t;

a= intercept (the value of Exp_t when $Pop_t = 0$)

b=slope (the change in Exp_t for a one unit change in Pop_t)

The equations of all possible straight lines between the dependent and independent variable are determined by the values of ‘a’ (the intercept) and ‘b’ (the slope). Least squares regression estimates the values ‘a’ and ‘b’ which determine the best possible straight line that will fit the graphic representation of the actual data points.

An example using York Regional Police (YRP) expenditures follows. Chart 1 shows the values for YRP expenditure in thousands of dollars (the vertical axis) plotted against total York Region population (the horizontal axis), for nine years. The data tend to trace out the upward sloping straight line drawn on the chart. That line is estimated by the regression technique, which finds the value of the intercept and slope that best fits the points.[99]

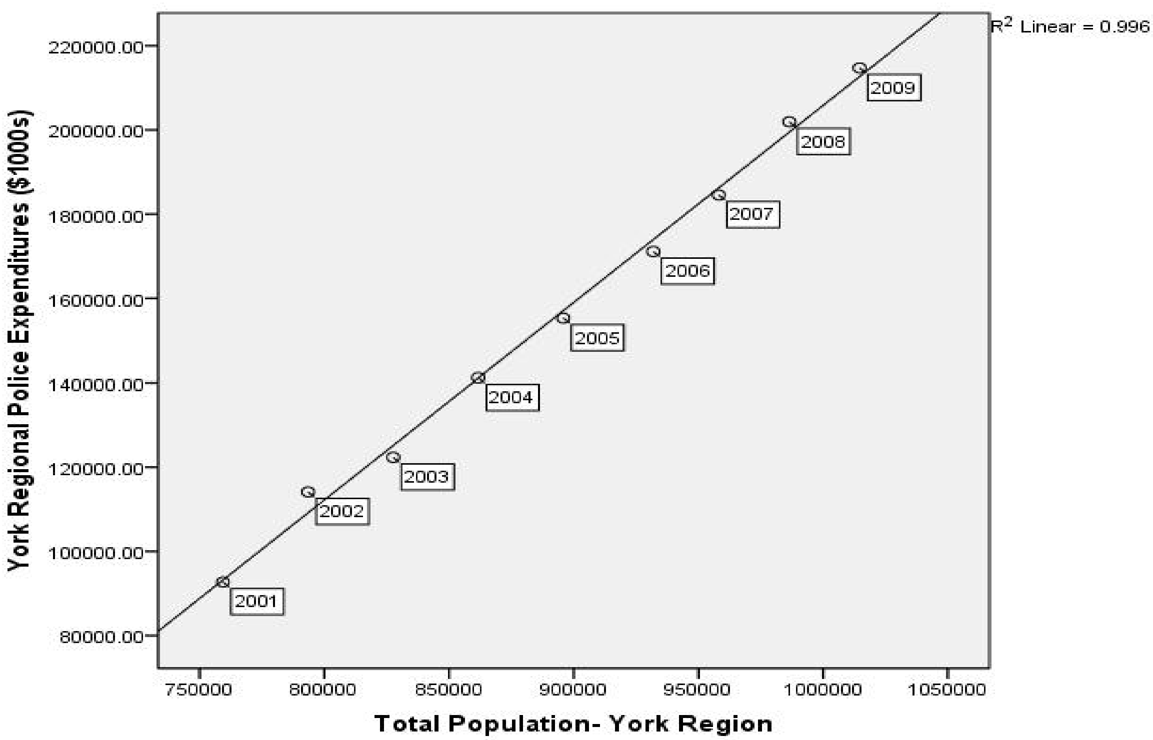
[99] In technical terms, least squares regression finds the values for the intercept and slope that minimize the sum of the squared vertical distances between each data point and the line.

The equation for the regression is:

YRP_t =-262,194 + .468 $Totpop_t$

Where:
YRP_t = York Regional Police Expenditures in year t and
$Yorkpop_t$ = Total York Region population in year t

Figure A1: Scatter Diagram of York Regional Police Operating Expenditures and York Region Total Population



The estimated line has an R^2, which is an index number measuring the "goodness of fit". A value of 1 would be a perfect fit, with every point falling exactly on the line, while 0 would be a case where the regression line was worthless. As you can see the fit for York Regional Police expenditures is almost perfect, with an R square of .996.

Once the estimate is available, it is a simple procedure to calculate the values for specific human services expenditures from 2011 to 2031. The York Region Planning and Development Services Department has provided population predictions (overall and for specific age groups) for each five year period. The population value is substituted into the estimated equation (as the relevant value for the independent variable).

For example, the Planning and Development Services Department predicts that the total York Region population in 2016 will be 1,200,144. That number is substituted into the YRP equation to get our prediction for YRP expenditures in 2016:

$$\begin{aligned} YRP_{2011} &= -262{,}194 + .468\ Totpop_{2016} \\ &= -262{,}194 + .468 \times 1{,}200{,}144 = 299{,}473 \text{(in \$000's) or \$299 million} \end{aligned}$$

Table A1 provides a list of the specific population independent variables used to estimate human services operating expenditures. In some cases, an agency's or department's expenditures were broken down on a program basis, and different population variables were used to predict each portion of the operating expenditures.

Table A1: Specification of Regression Analyses for Human Services Provided Directly by York Region

YORK REGION DEPARTMENTS	*SUB-PROGRAM (IF APPLICABLE)*	*INDEPENDENT VARIABLE*
Emergency Medical Services		York Region population-60 years +
Long Term Care and Seniors Community Programs	Newmarket Health Centre-LTC part1	York Region population-72 years +
	Maple Health Centre-LTC part 1	York Region population-72 years +
	Adult Day Centres-LTC part 2	York Region population-50 years +
	Alternative Community Living-LTC part 3	York Region population-65 years +
	Psychogeriatric Consulting-LTC part 3	York Region population-65 years +
	Community Support Programs-LTC part 3	York Region population-65 years +
Public Health	Prov. Mandated Programs (incl. WNv)-PH part 1	York Region population
	Healthy Babies Healthy Children - PH part 2	York Region population-0-6 years
	SARS Short Term Action Plan- PH part 1	York Region population
	Smoke-Free Ontario Programs -PH part 3	York Region population-9 years+
Community Services & Housing	Social Assistance- CSH Part 1	York Region population
	Child Care Fee Assistance - CSH Part 2	York Region population-0-6 years
	Early Intervention Services- CSH part 2	York Region population-0-6 years
	Special Needs Programs -CSH part 2	York Region population-0-6 years
	Resource Centres _CSH part 2	York Region population-0-6 years
	Early Years Programs -CSH part 2	York Region population-0-6 years
	Child Care Administration CSH part 2	York Region population-0-6 years
	Best Start Initiatives CSH part 2	York Region population-0-6 years
	ELCC Initiatives CSH part 2	York Region population-0-6 years
	Homemakers and Nurses CSH part 3	York Region population-50 years +
	Hostels (Emergency/Domiciliary) CSH part 4	York Region population 16-64 years
	Homelessness Programs CSH part 5	York Region population-0-64 years
	Social Housing CSH part 1	York Region population
	Community Development Investment CSH part 1	York Region population
	Human Services Planning CSH part 1	York Region population
Police		York Region population
Transit	Department's projections from Transportation Master Plan update process - in 2006 constant dollars: 2011-$164,305,000; 2021-$469,736,000; 2031- $591,000,000; other values interpolated.	

Table A2: Specification of Regression Analyses
for External Providers of Human Services

EXTERNAL PROVIDERS	*INDEPENDENT VARIABLE*
Southlake Regional Health Centre	York Region population 60 years and older
York Central Hospital	York Region population 60 years and older
Markham Stouffville Hospital	York Region population 60 years and older
Vaughan Hospital	Use York Central estimates from 2016 onward
Seneca College	York Region population 17-22 years of age
United Way of York Region	York Region population
York Region District School Board	York Region population 4-18 years of age
York Catholic District School Board	York Region population 4-18 years of age
Aurora	Aurora- total population
East Gwillimbury	East Gwillimbury- total population
Georgina	Georgina- total population
King	King- total population
Markham	Markham- total population
Newmarket	Newmarket- total population
Richmond Hill	Richmond Hill- total population
Vaughan	Vaughan- total population
Whitchurch-Stouffville	Whitchurch-Stouffville - total population

Appendix B

This appendix provides a list of persons who contributed to this study.

Many committed professionals and partners of The Regional Municipality of York provided both their expenditure data on and experiences with human service delivery in York Region. The authors would like to particularly acknowledge officials in the Community and Heath Services Department for their management and coordination support throughout this project.

Approximately 35 people were interviewed or consulted for information. These include officials of The Regional Municipality of York; the Towns of Markham and Newmarket; the York Regional District School Board and the York Catholic District School Board; the Central LHIN; York Central Hospital; the Ontario Ministry of Culture, Citizenship, and Immigration; the Ontario Trillium Foundation; Service Canada and the federal Department of Citizenship and Immigration; Seneca College; and United Way of York Region. We thank all of these individuals for their cooperation and assistance.

About the Authors and Centre

The principal authors of this analysis and report include: Dr. Allan Maslove, Dr. Gene Swimmer and Ms. Elaina Mack. Dr. Maslove is a Professor in the School of Public Policy and Administration (SPPA) at Carleton University where he specializes in economics, public budgeting, benefit-cost analysis, urban policy, and health policy. Also a Professor in SPPA, Dr. Swimmer teaches graduate-level courses on quantitative methods (statistics), microeconomics and labour relations. Ms. Mack was a Project Coordinator with the Centre for Urban Research and Education at Carleton University where she is involved in researching and evaluating municipal and community governance projects. A Carleton University student, Yuma Kim, provided research assistance.

The Centre for Policy and Program Assessment at Carleton University exists to contribute constructively to the education of those involved in the assessment of public expenditure, regulatory and tax policies, and programs, and to increase public understanding of the uses and abuses of such assessments. The Centre is composed of experienced social scientists drawn from several departments, schools, and institutes at Carleton who possess extensive knowledge of, and applied research experience in, numerous public policy fields and program areas at the federal, provincial urban and international levels of government. The Centre has undertaken work for the Prime Minister's Office; the Department of National Defence; Correctional Service of Canada; the Department of Energy, Mines and Resources; the Science Council of Canada; Canada Mortgage and Housing Corporation; the Department of Agriculture; the Centre for Resource Studies at Queen's University; the Ontario Royal Commission on Asbestos; and the Native Council of Canada and the Royal Commission on Aboriginal Peoples.

For more information about the Centre or this study, please contact:

Dr. Susan Phillips
Director and Professor
School of Public Policy and Administration
613) 520-2600, Ext. 2633
susan_phillips@carleton.ca

www.carleton.ca/sppa

Economic Analysis of Human Service Costs to 2031

Recommendations for Enhancing Human Services Planning in The Regional Municipality of York

Community and Health Services Committee
September 15, 2010

Overview

- Purpose
- Background
- Presentation of Study Results (Carleton University)
- Next Steps

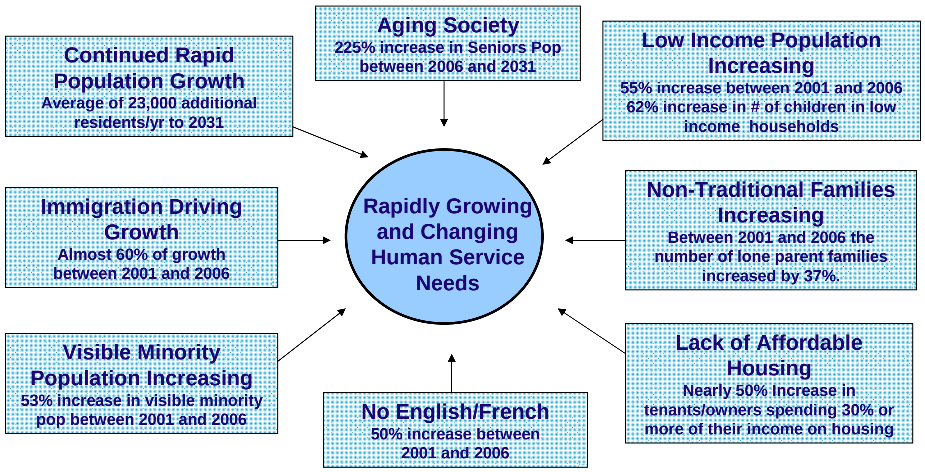
Purpose

- Glean better understanding of future trends, pressures and opportunities ahead
- Identify strategies for addressing future demands/trends
- Tool to support funding advocacy

Background

- Study originally commenced in 2007
- Internal restructuring placed completion of study on temporary hold
- Study recommenced 2009
  - study revised to address identified issues
  - financial data updated
  - minor re-scoping
- Collaborative Effort
- Positive Feedback
- Study aligns with Vision 2026, Official Plan, Sustainability Strategy and Multi-Year Plan

Demographic Trends/Pressures



Components/Scope of Study

- Review of population growth projections and demographic make-up
- Policy context for human services
  - Including potential opportunities and challenges of planned urban intensification
- Expenditure Forecasts to 2031
- Recommendations/Strategies

Policy Context: Trends

- Key Trends
  - Demographic Changes
  - Funding
  - Legislative Changes
  - Service Integration
  - Service Delivery
  - Evidence-based decision making
  - Community involvement
  - Urban Intensification
- Implications of Policy Trends

Expenditure Forecasting Methodology

Human Services considered:

- York Region Services
  - Emergency Medical Services
  - Long Term Care and Seniors Community Programs
  - Public Health
  - Community Services
  - Housing
  - Police Services
  - Transit
- External Services
  - Hospital-based healthcare
  - Education (Public and Catholic School Bds and Seneca College)
  - Local Municipal culture, libraries and recreation
  - Community and social services funded by United Way of York Region

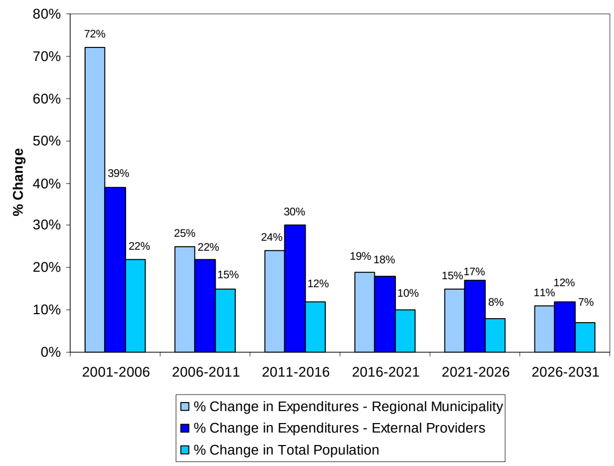
Expenditure Forecasting Methodology

- Forecast of 'Total Operating Expenditures' only - Capital not considered
- Regression Analysis
  - Standard statistical tool – assumes linear relationship between operating expenditure and population for previous years (8-12 years of historical expenditure data used)
  - Different population aggregates used for each provider
- Model used to predict all human services expenditures except Transit (used department's internal estimates, based on different methodology)

Assumptions of Model

- Agency-specific inflation rate continues
- Rate of efficiency or quality gains continue
- Service levels continue

% Change in Total Human Services Expenditures
York Region (excluding Transit) and External Providers
5 Year Intervals – 2001 to 2031

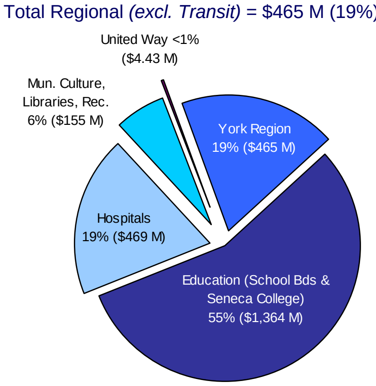


Human Services Expenditure By Provider
2006 Actual vs. 2031 Projected

2006 Actual

Total = $2.46 Billion

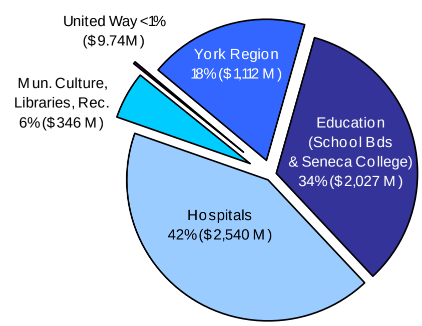
Total Regional *(excl. Transit)* = $465 M (19%)



2031 Projected

Total Estimated = $6.03 Billion

Total Regional *(excl. Transit)* = $1.11 B (18%)



Predicted Total and Per Capita Human Services Expenditures, by Category: Regional Municipality of York

Category of Human Services	2006 (Actual)	2016 (% change 2006-2016)	2031 (% change 2016-2031)
Emergency Medical Services	$32M	$63M (97%)	$118M (87%)
Per Capita	$34	$53 (53%)	$79 (49%)
Long-term Care	$29M	$52M (79%)	$119M (127%)
Per Capita	$31	$44 (39%)	$79 (80%)
Public Health	$45M	$74M (64%)	$107M (45%)
Per Capita	$48	$61 (27%)	$71 (15%)
Community Srvcs. & Housing- Total	$187M	$237M (26%)	$324M (37%)
Per Capita	$201	$197(-2%)	$215 (9%)
Housing	$50M	$76M (53%)	$103M (36%)
Per Capita	$53	$63 (19%)	$68 (8%)
Non-Housing	$137M	$161M (17%)	$221M (37%)
Per Capita	$148	$134 (-9%)	$147 (9%)
Police	$171M	$300M (75%)	$443M (48%)
Per Capita	$184	$250 (36%)	$294 (18%)
TOTAL	**$465M**	**$726M (56%)**	**$1,112 M (53%)**
Per Capita	**$499**	**$605 (21%)**	**$737 (22%)**
Transit (excludes inflation)	$99M	$317M (221%)	$591M (86%)
Per Capita	$106	$264 (149%)	$392 (48%)

York Region

Community and Health Services Committee, September 15, 2010

Slide 13

Predicted Total Human Services Expenditures By Various External Providers in York Region by Category

Category of Human Services	2006 Actual	2016 (% change 2006-2016)	2031 (% change 2016-2031)
Hospitals	$469 M	$1,342M (186%)	$2,540M (89%)
Municipal Culture, Libraries and Recreation	$155M	$242M (56%)	$346M (43%)
Public and Catholic District School Boards	$1,313M	$1,519M (16%)	$1,961M (29%)
Seneca College (20% of total)	$51M	$62M (22%)	$66M (8%)
United Way of York Region	$4M	$7M (75%)	$10M (43%)
TOTAL- EXTERNAL PROVIDERS	$1,993M	$3,171M (59%)	$4,923M (55%)

York Region

Community and Health Services Committee, September 15, 2010

Slide 14

Key Learnings

- Fiscal pressures on York Region to be greatest over the next decade and particularly between now and 2016
- Seniors and transit services will outpace all other areas to 2031
- Urban Intensification will bring both potential opportunities and potential challenges
- Region continues to be one player in a large network of human service providers
- Numerous uncertainties that could have a significant impact on future expenditure

Recommendations

1. Collaborative Planning
2. Investing
3. Managing and Delivering
4. Data Monitoring and Evaluation

Staff Recommendations / Next Steps

- Regional Council approve the study in principle
- Share broadly and initiate dialogue
  - Study Recommendations applicable across the broader human services sector
- Request Human Services Planning Board of York Region to consider recommendations in their work