

# Early Childhood Development as a Social Determinant of Health in Niagara



Brock University  
Presentation to Med Plus Program  
March 20, 2008

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Coordinator

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Years

**eccdc**

early childhood community development centre

Understanding the Early Years



Human Resources and  
Social Development Canada

Ressources humaines et  
Développement social Canada

The Understanding the Early Years initiative is funded by Human Resources and Social Development Canada. For further information, visit [www.hrsdc.gc.ca](http://www.hrsdc.gc.ca)

# Session Description

- Review definition of 'Social Determinants of Health'
- Identify importance of understanding the early years
- Explore early childhood development as a SDOH
- Examine local data and its use in Niagara
- Questions and discussion

# Foundation

“Health is a universal human aspiration and a basic human need.

The development of society, rich or poor, can be judged by the quality of its population’s health, how fairly health is distributed across the social spectrum, and the degree of protection provided from disadvantage as a result of ill-health.”

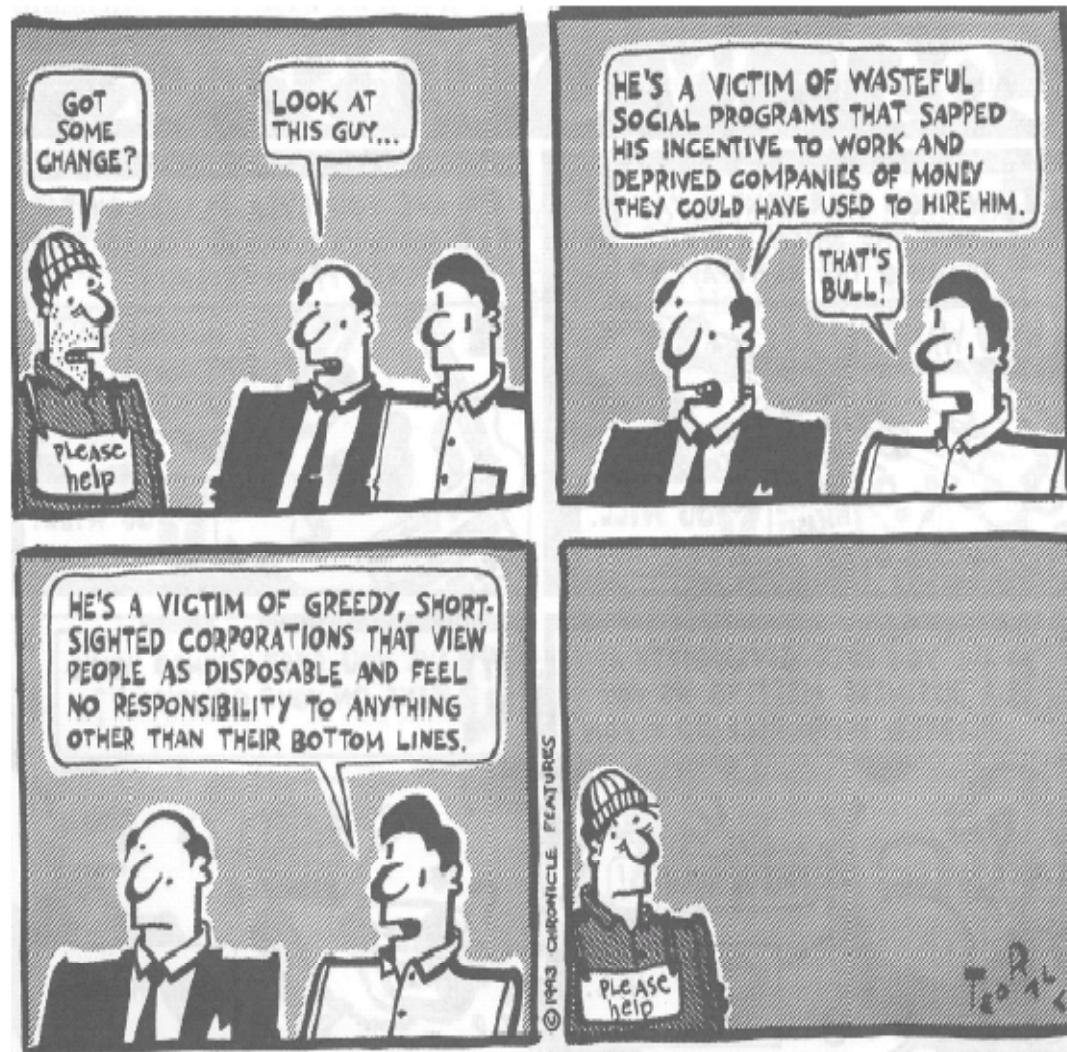
**~ World Health Organization’s Commission on Social Determinants of Health**

# Working definition of SDOH

Social determinants of health are the economic and social conditions that influence the health of individuals, communities, and jurisdictions as a whole. (They) are about the quantity and quality of a variety of resources that a society makes available to its members.

~ Dennis Raphael, PhD - School of Health Policy and Management, York University, Presentation to the University of Waterloo Health Studies and Gerontology Department Seminar, October 30, 2007

# Reflection on Political Ideologies



© 1993 CHRONICLE FEATURES

# Reflection on Media Coverage

- The mass media almost always cover health as a personal issue, with emphasis on individual behavior, choice, and habits. Risks become personal risks, and health issues become medical issues. News coverage rarely presents stories about community health.

~ **Lindbladh and others, 1998.**

- Stories on health “communicate personal responsibility rather than social accountability”

~ **Wallack, 2004.**

# Benefits of SDOH Approach

“It bridges the artificial distinction between technical and social interventions, and demonstrates how both are necessary aspects of action. It seeks to redress the imbalance between curative and preventive action and individualized and population-based interventions. Also, by acting on structural conditions in society, a social determinants approach offers a better hope for sustainable and equitable outcomes.”

~ **Baum, 2002.**

# Focus of Canadian SDOH Conference

- early life
- education
- employment and working conditions
- food security
- health services
- housing
- income and income distribution
- social exclusion
- social safety net
- unemployment



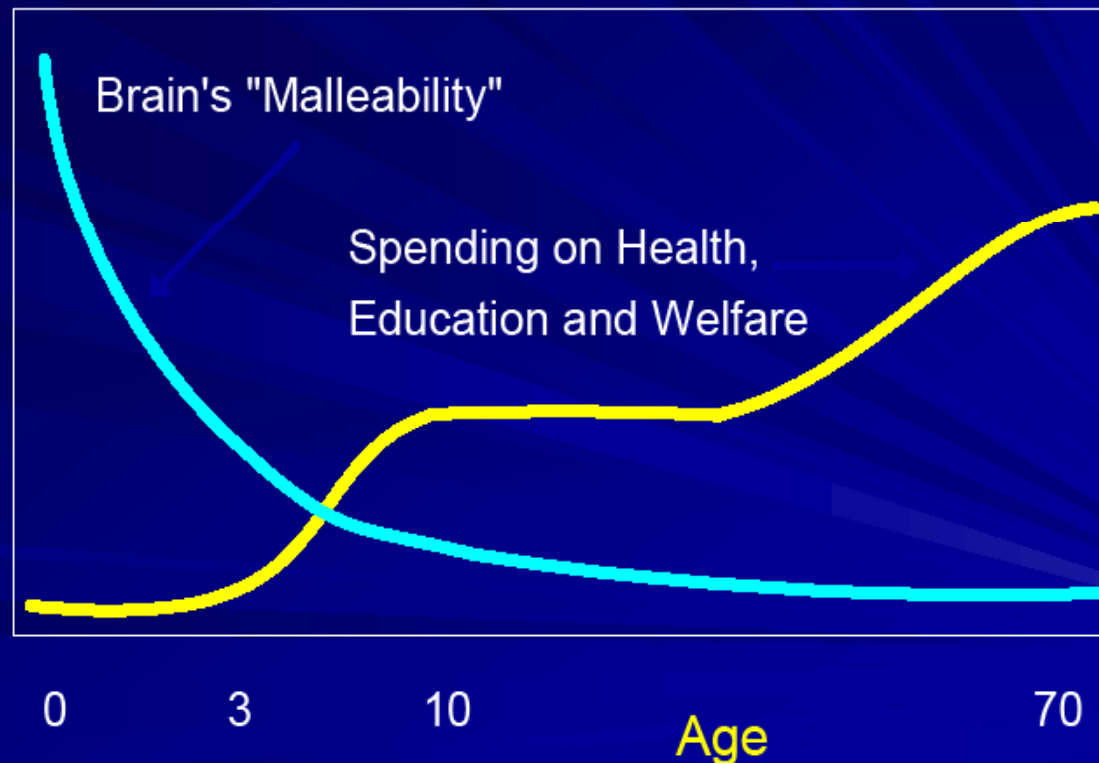
# Why focus on the Early Years?

- Experiences before school impact all aspects of the rest of our lives.
- These experiences influence the # of brain cells, the # of connections among them, and the way these connections get “wired”.
- While individual children overcome disadvantage, the tendency established early on among the group persists. (the population health trajectory is set early)
- 86% of mothers giving birth are back working by the time the baby is a year old. (Statistics Canada, 2001)

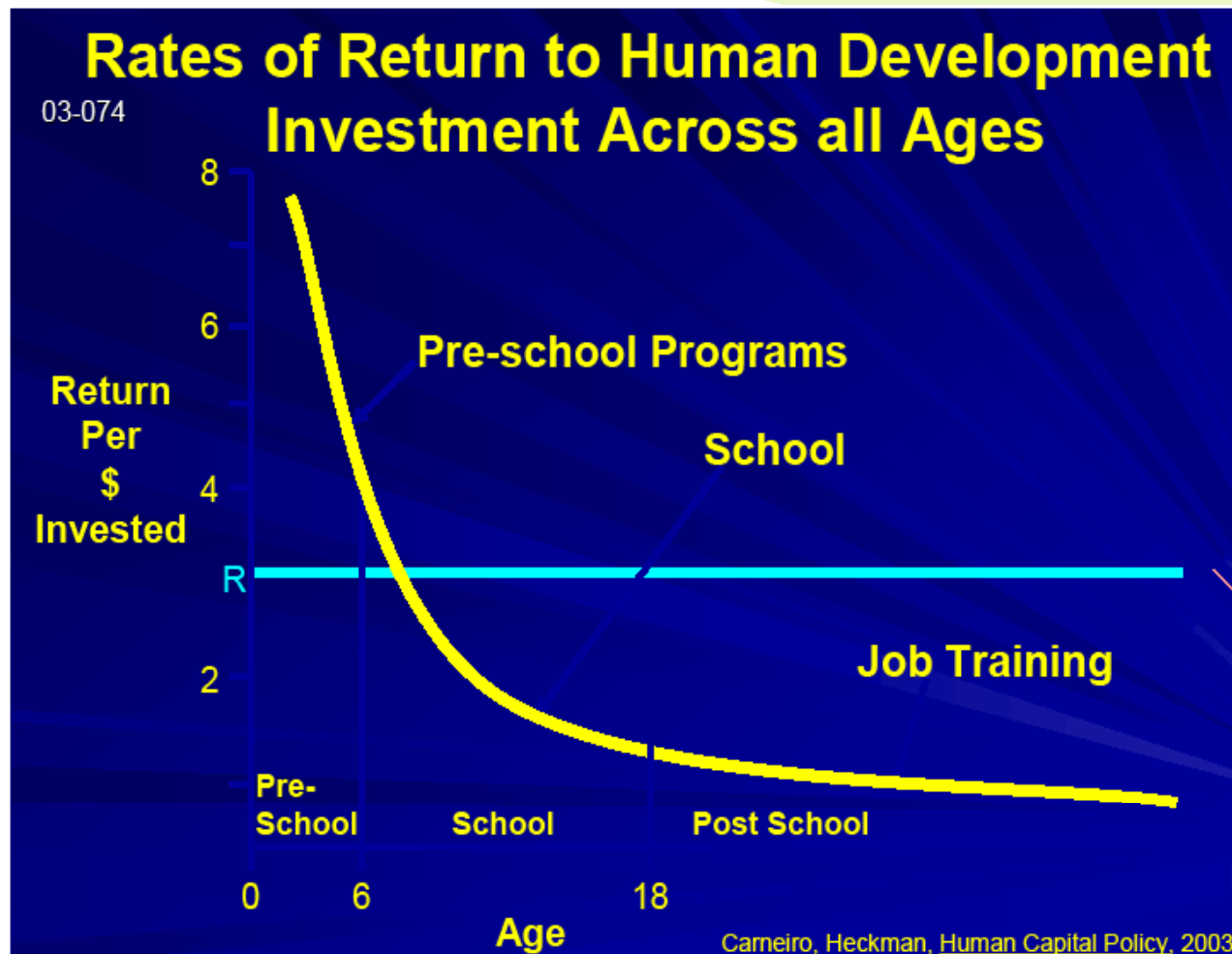
# An Investment Opportunity

97-044

## The Mismatch Between Opportunity and Investment



# Providing Better Returns



# Reflection on Policy Analysis

- Many analysts and policymakers focus on symptoms and treatments, microanalysis of individual risk factors, and changing people's behavior and lifestyles, not conditions or places.
- They present options primarily through a biomedical model and remedial solutions, mostly associated with health care, rarely stressing social transformation.

~ **Hofrichter, 2003.**

# How does UEY fit in?

**Funder:** HRSDC (sites across Canada)

**Sponsoring agency:** ECCDC

**History:** Niagara Falls from 2001-2007,  
Niagara Region from 2005-2008

**Community Coalition:** Early Years Niagara  
Planning Council and Research Advisory

**Partners:** Region of Niagara, Ontario

Early Years Centres, DSBN, NCDSB,  
Niagara College, Brock 😊, various early  
years service providers, community  
groups, businesses and service clubs

# Purpose of UEY

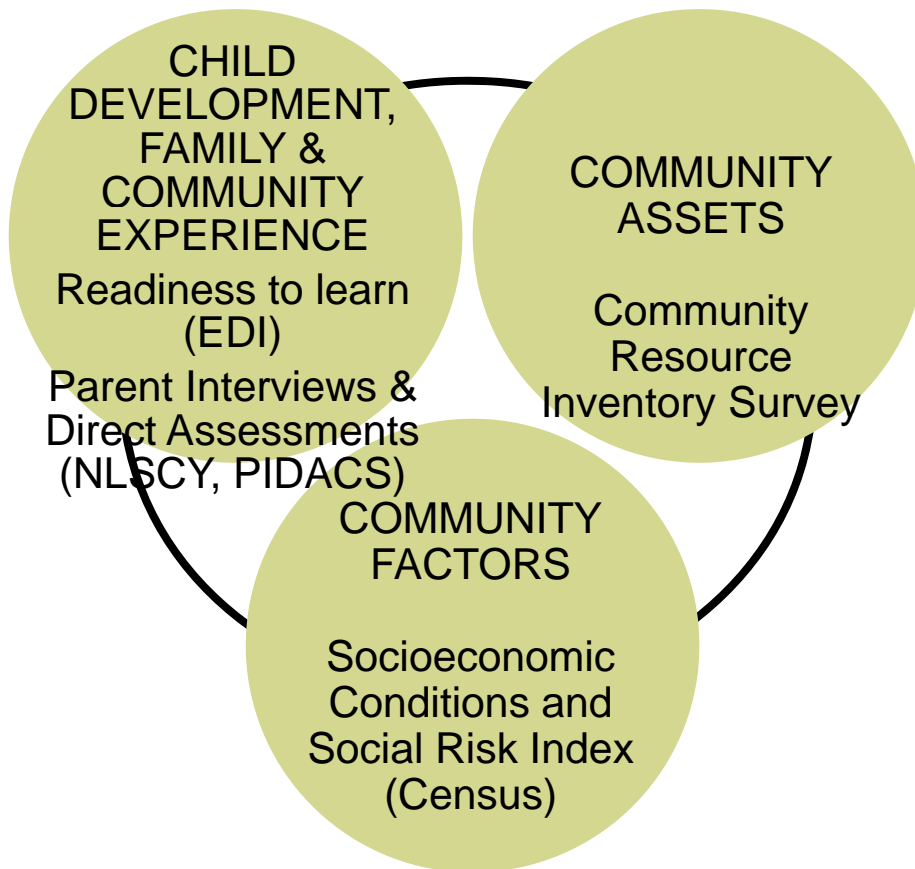
- **Promote awareness and understanding concerning the importance of the early years**
- **Examine the relationship between community factors and early learning and development outcomes in Niagara**
- **Report on local and national findings**
- **Support evidence-based decision making and planning in the community (capacity building)**

# The Vision

## **Gather population-based data that:**

- Takes stock of how well communities are supporting young children
- Measures readiness to learn in school across developmental domains
- Inspires small changes for large numbers of children
- Brings better population wide outcomes

# UEY Knowledge Gathering



## UEY Timeline

- 2001 EDI – UEY Niagara Falls
- 2002 National Longitudinal Study of Children & Youth (NLSCY)
- 2001 Census/Statistics Canada - UEY Niagara Falls & Niagara Region
- 2002 EDI – UEY Niagara Falls/Ontario Early Years Niagara Region
- 2003 EDI – UEY Niagara Falls
- 2003 Community Resources Inventory Survey – Ontario Early Years Niagara Region/UEY Niagara Falls
- 2005 EDI - UEY Niagara Falls/Ontario Early Years Niagara Region
- 2005 NLSCY – UEY Niagara Falls



# Why School Readiness?

- Based on the concept of developmental health
- Assesses context of early experiences
- Reflects developmental outcomes and milestones achieved during first 4-6 years
- *Measurable* holistic concept spanning several developmental areas
- Looks for improvements in largest group possible

# What is Readiness for School?

Refers to the child's ability to meet the task demands of school, such as:

- being comfortable exploring and asking questions,
- listening to the teacher,
- playing and working with other children,
- remembering and following rules.

In short, it is the ability to benefit from the educational activities that are provided by the school.

# EDI Domains of School Readiness

1. Physical Health & Well-being
2. Social Competence
3. Emotional Maturity
4. Language & Cognitive development
5. Communication Skills & General Knowledge



# Factors Increasing Risk

- Child health (low) 2.35
- Gender (boy) 2.32
- Income (low) 2.02
- Family status (not intact) 1.83
- Age (younger half) 1.36

Source: Janus & Duku 2007

# Developmental Health Reflection

A **large number** of children at a **small risk** for school failure may generate a much **greater burden** of suffering than a **small number** of children with a **high risk**.

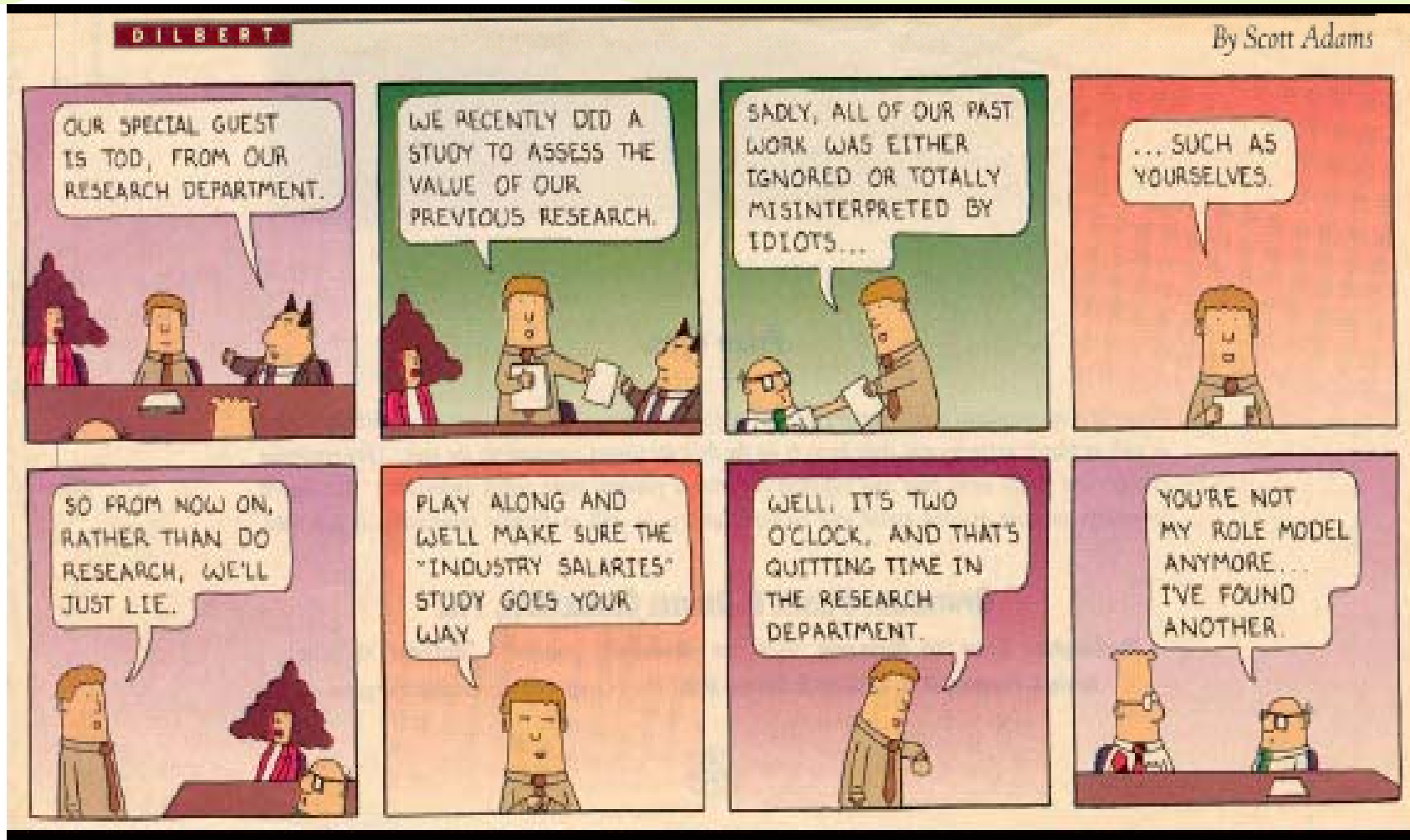
~ Based on Rose 1992, Offord et al., 1998.

# The Intended Outcomes

**Give communities a set of factual and understandable results that can:**

- Predict how children will do in elementary school
- Monitor groups of children over time
- Support planning for action
- Justify and report on community initiatives
- Influence policy research and decision-making
- Make a difference for parents and children 0-6

# How to mobilize knowledge?



# Research Products and Activities

- Maps, Studies, Reports, Charts/Graphs, Inventories and Action Plans
- Community Updates, School Board Reports, Parent Brochures, Calendars, Videos, Posters
- Research Communiqués and Articles
- Community and custom Presentations, Workshops, Forums, Conference Sessions, and Event Displays
- Website with documents available for downloading ([www.uey.eccdc.org](http://www.uey.eccdc.org))
- Partnering on research and planning initiatives



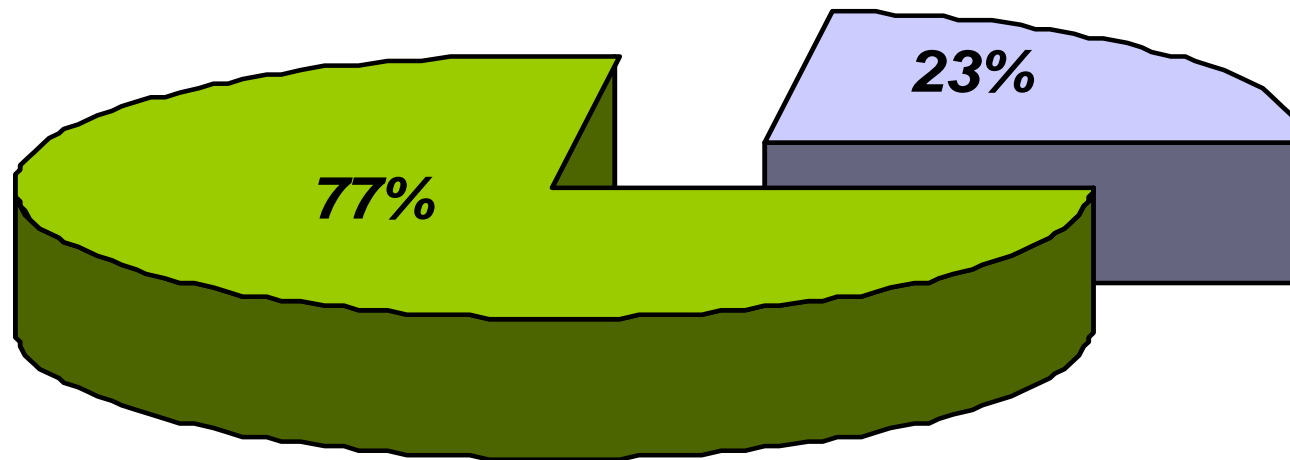


What's happening in early learning & development in Niagara?



# Overall Good Results 😊

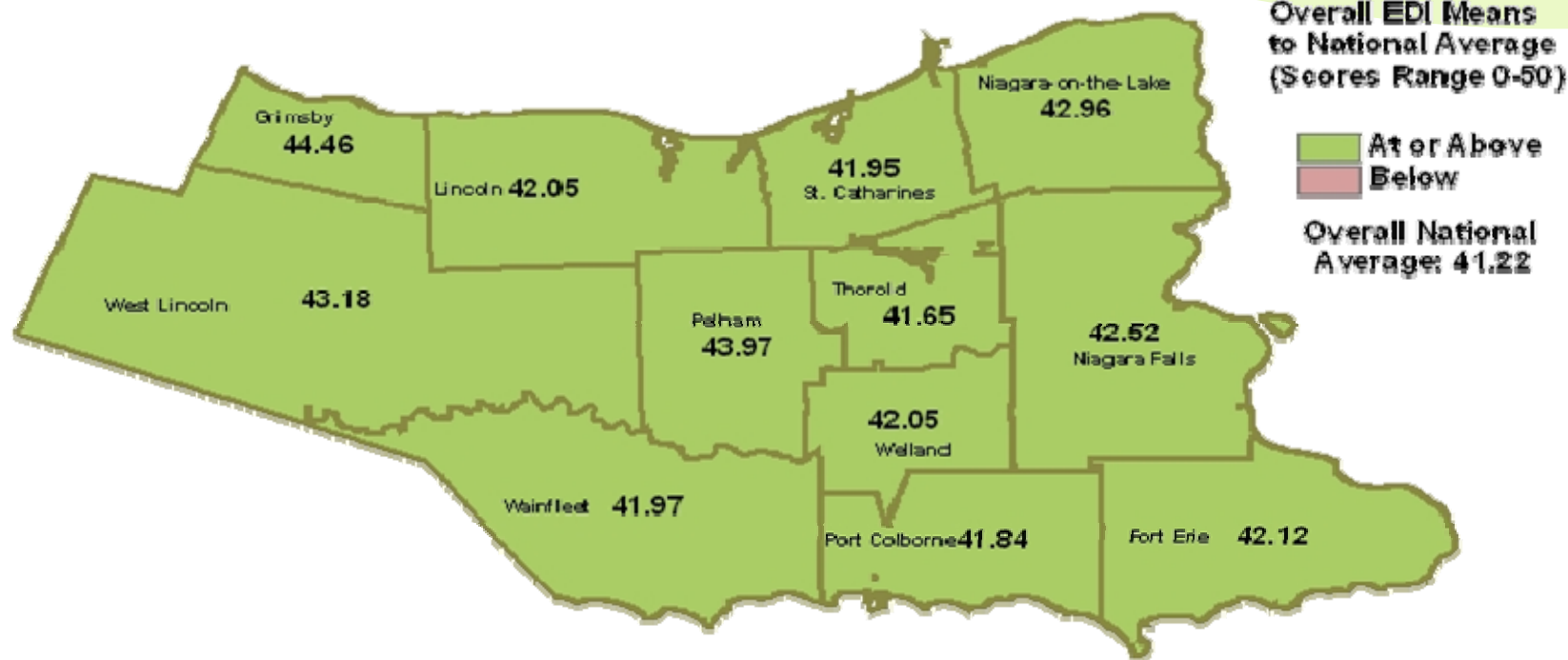
***% of Children On Track and Not On Track for School***



■ ***On Track*** ■ ***Not On Track***

# 2006 EDI Means by Municipality

**Overall EDI Means in Niagara Region**  
(Sample Size = 3014)

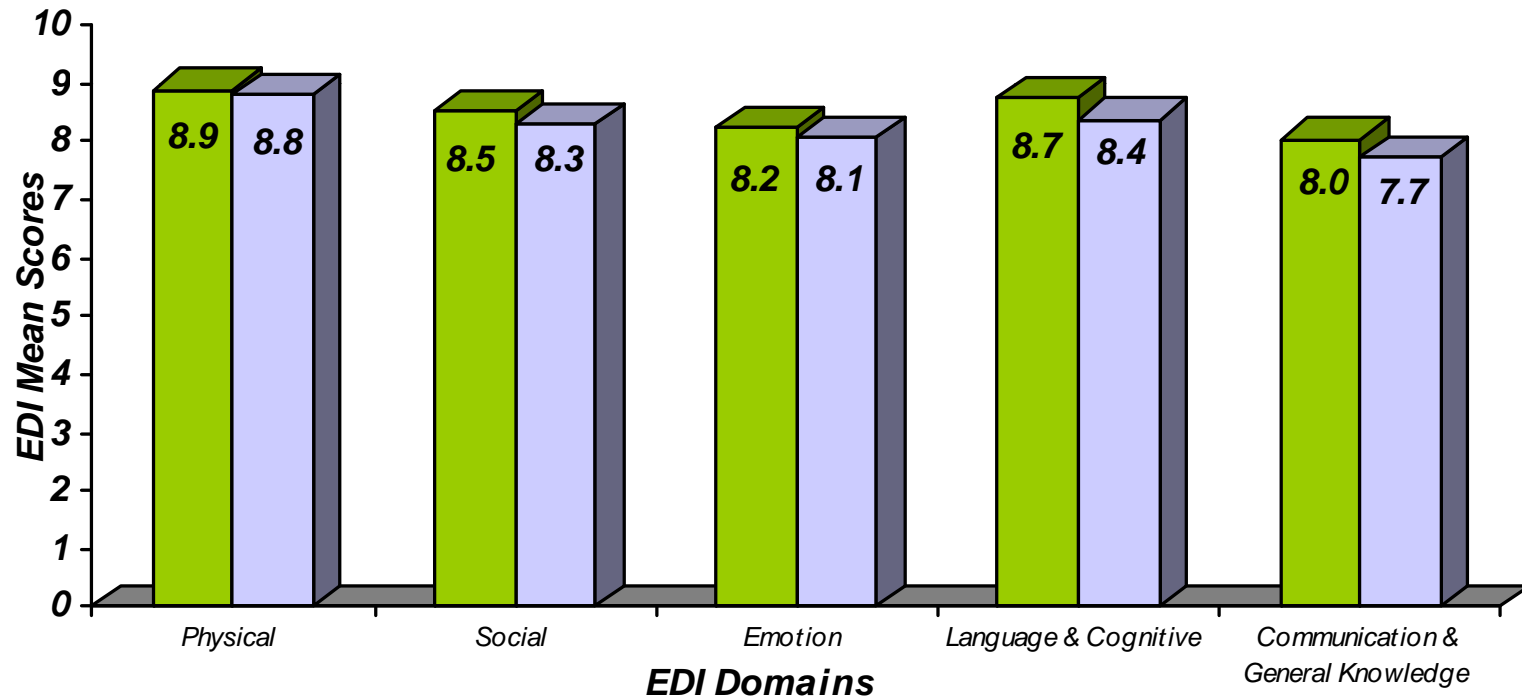


Data Sources:  
Base Map Features: Statistics Canada custom tabulation(s) from 2001 Census  
EDI Data: UEL & Office Centre for Child Studies, 2006  
Produced by: UEL & Office, 2007  
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# 2006 EDI Domain Comparisons

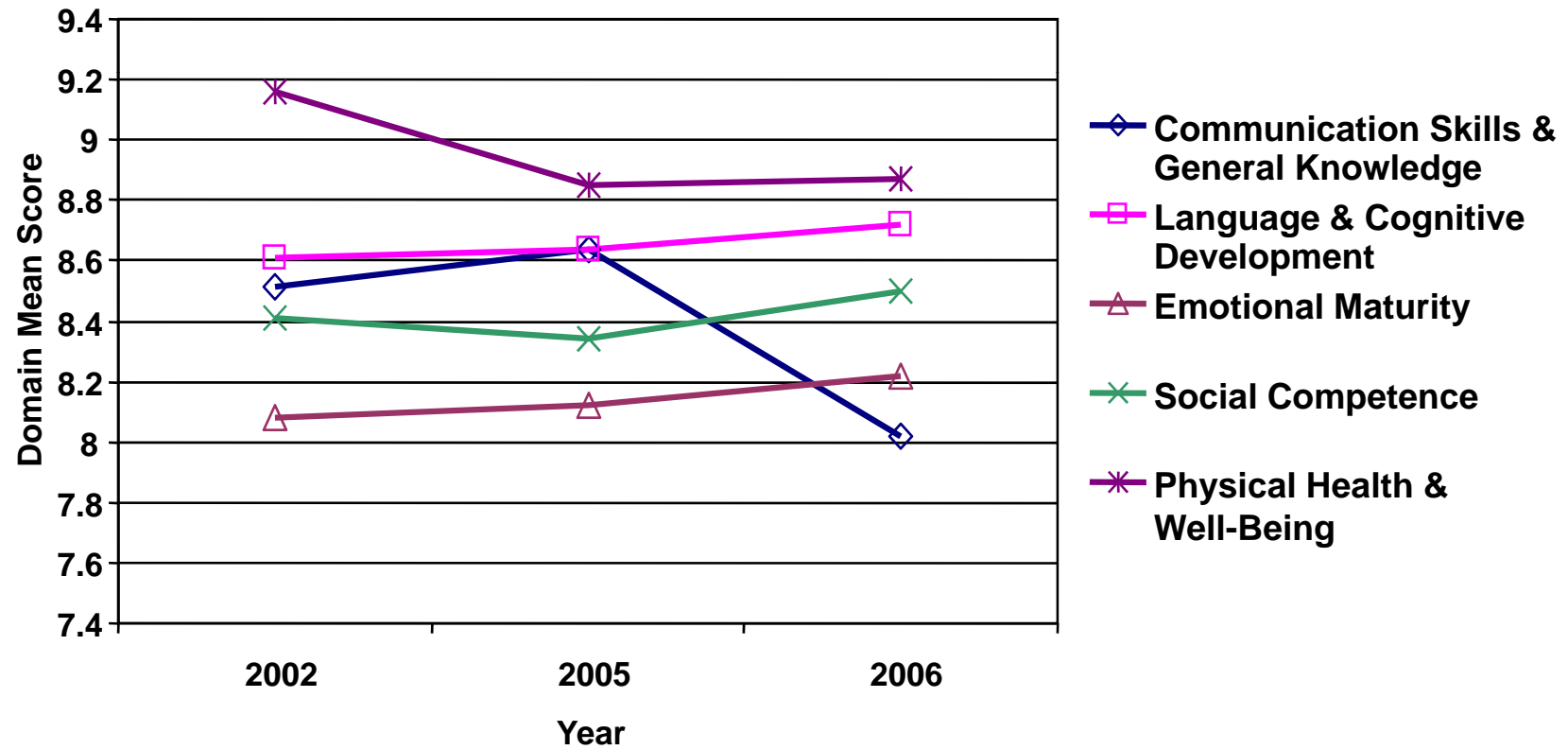
*Niagara Region 2006: Comparison of Children's Mean Scores and the National Average*



■ *Niagara Region*    □ *National Averages*

# Shifting trends...

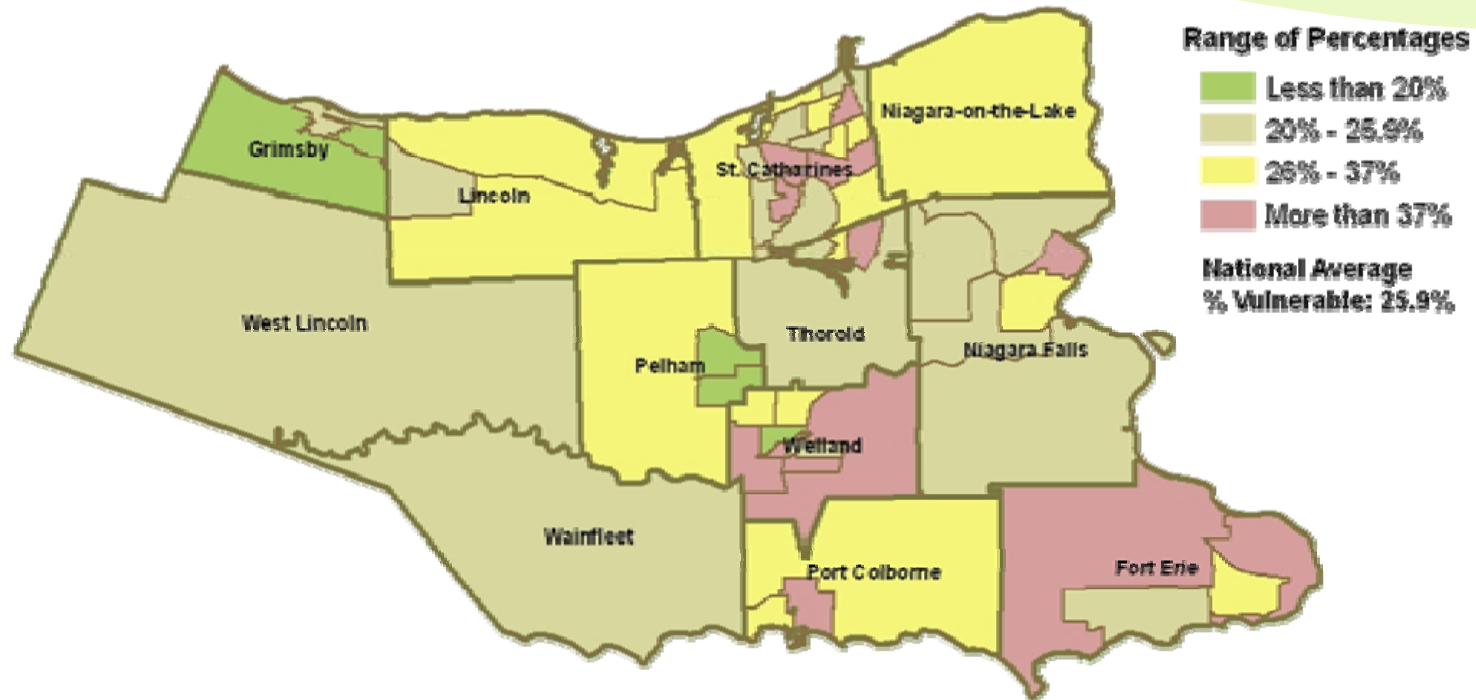
**Multi-Year Comparison of EDI Mean Scores,  
Niagara Region, 2002-2006**



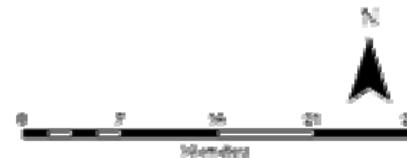
# Also Vulnerability ☹️

## % of Vulnerable Children by Neighbourhoods in Niagara Region

(Vulnerable: Children who scored below the 10th percentile on one or more readiness to learn domains)

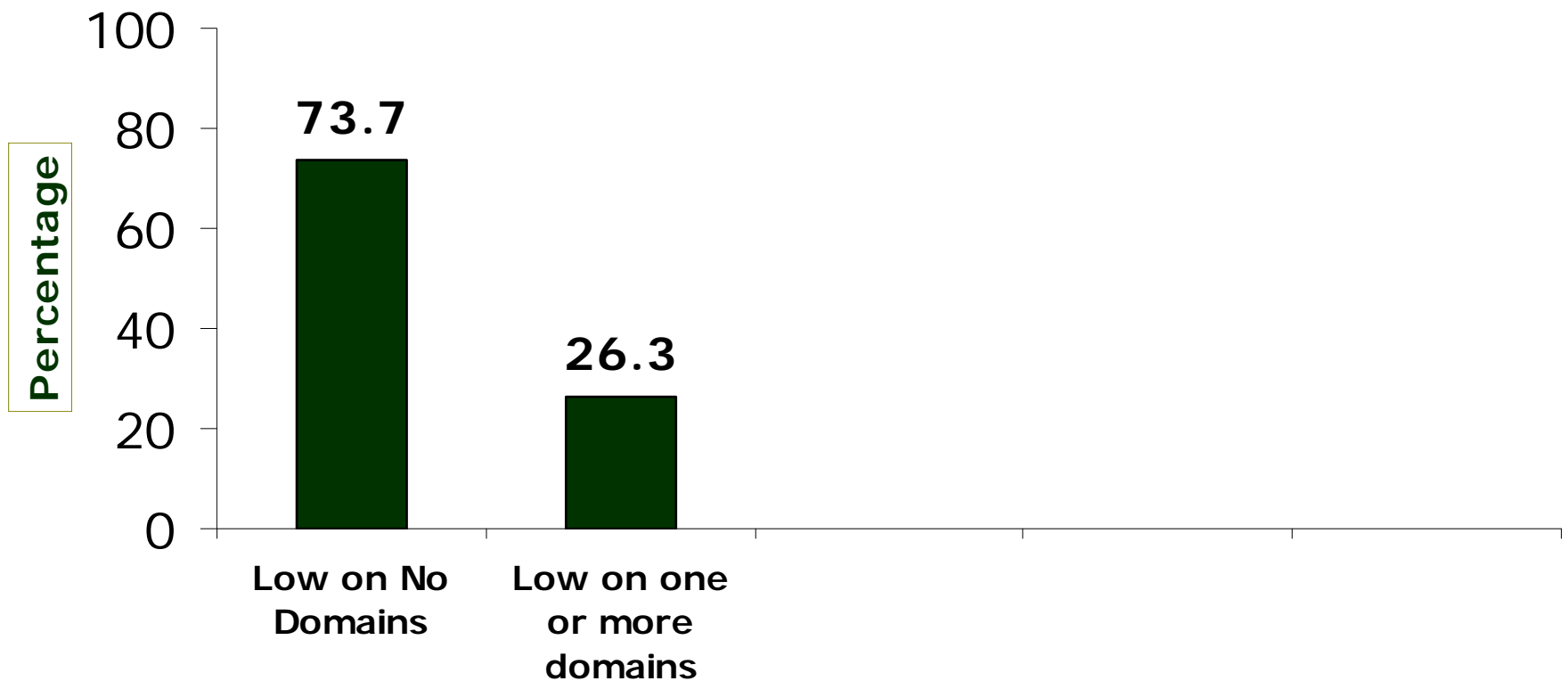


Data Sources:  
EDI Data: UEY & Offord Centre for Child Studies, 2006  
Base Map Features: Statistics Canada custom tabulations from 2001 Census  
Amalgamated Neighbourhoods: Ontario Early Years Niagara Region & UEY, 2007  
Produced by: UEY & Offord, 2007  
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# EDI and School Performance

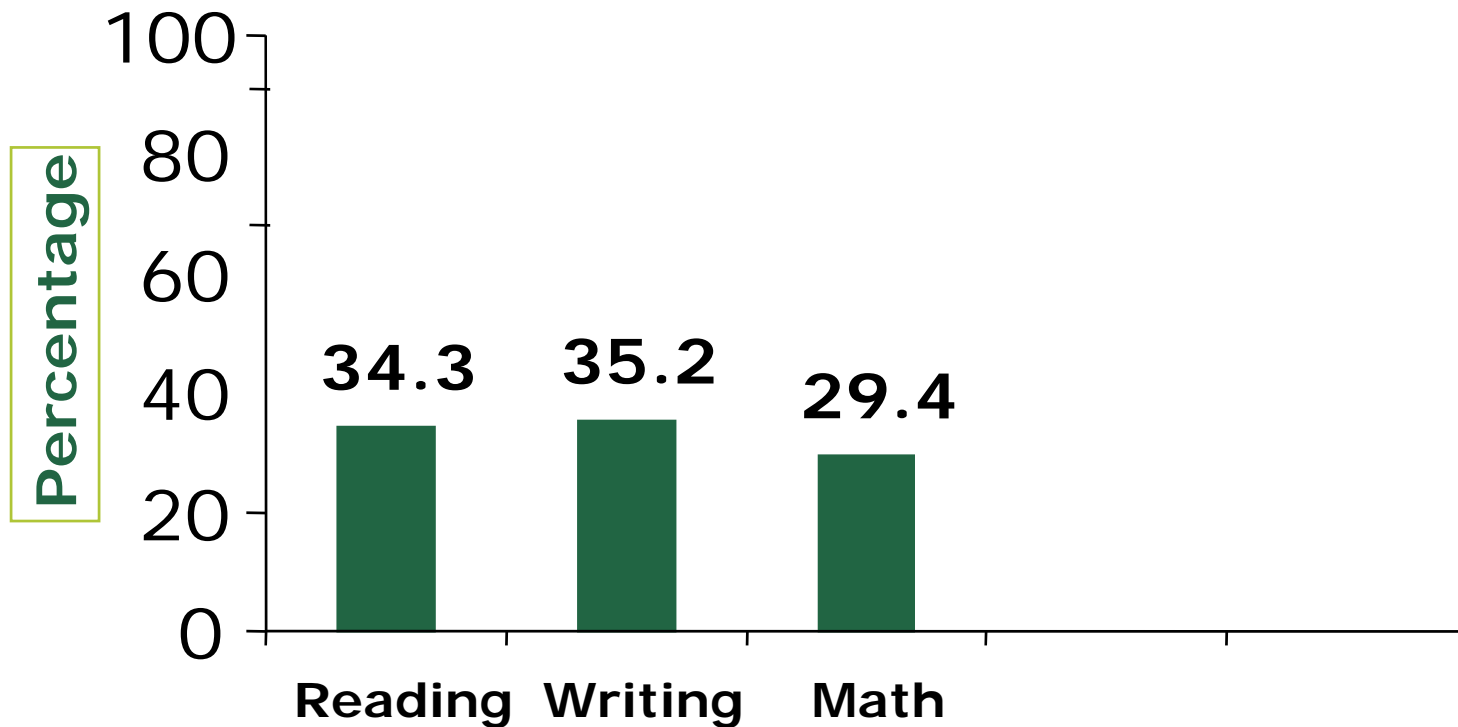
**2001/02 SK EDI Scores in Niagara Region  
(Percentage Scoring Low/Vulnerable i.e. Bottom 10th  
Percentile)**





# EQAO Scores below Standard

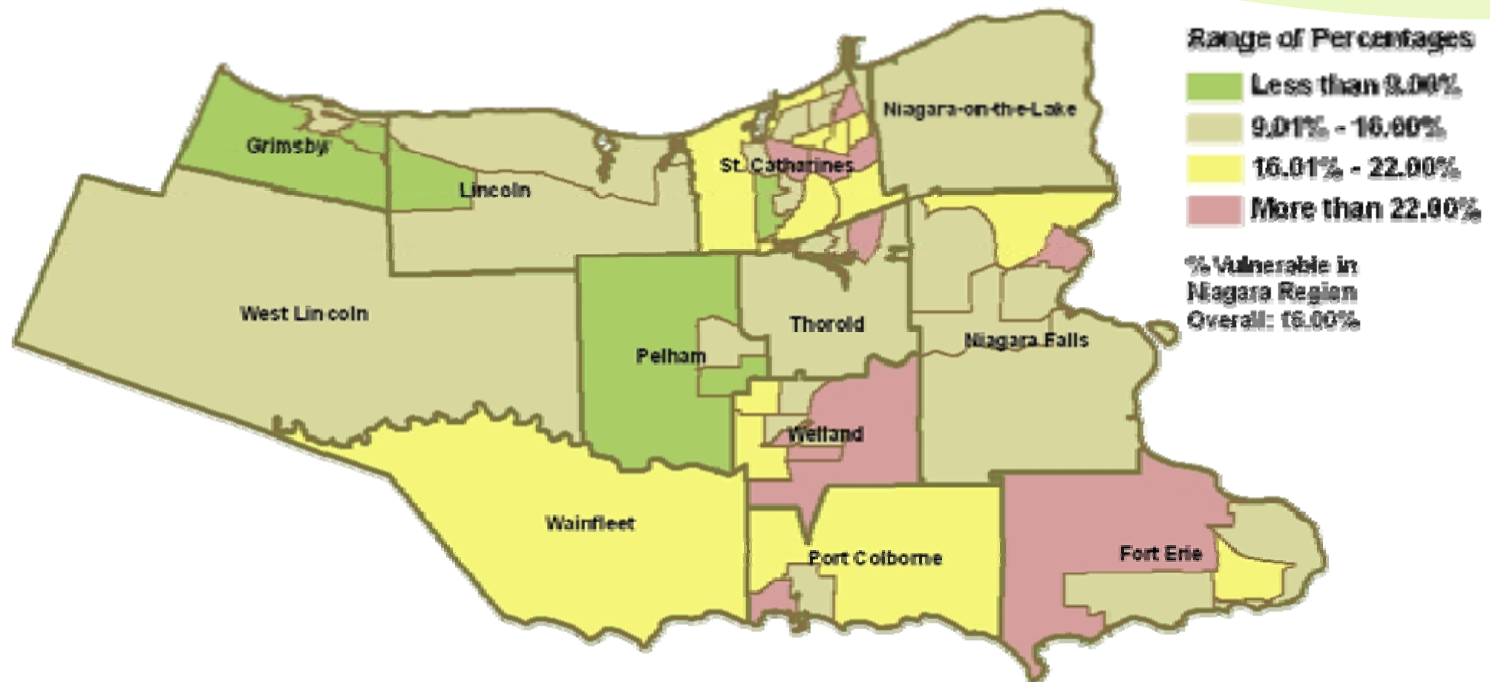
2004/05 Grade 3 EQAO Scores in Niagara Region  
(Percentage Scoring Below Provincial Standard)



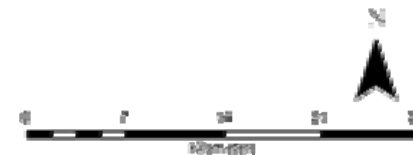
# 2006 Vulnerability by Domain

## % Vulnerable in Communication Skills & General Knowledge by Neighbourhoods in Niagara Region

(Vulnerable: Children who scored below the 10th percentile)



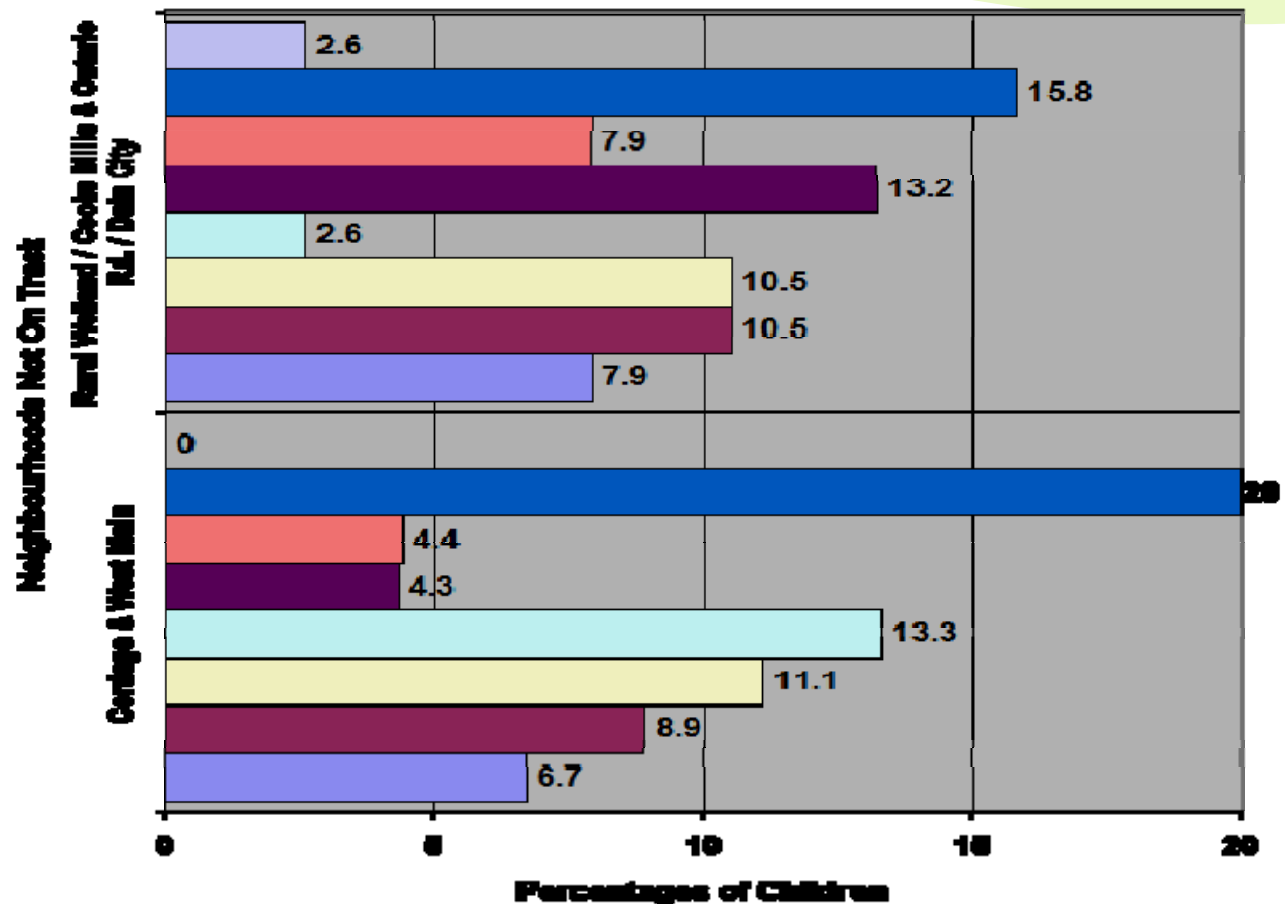
Data Sources:  
EDIC Data: UBY & Offord Centre Centre for Child Studies, 2006  
Base Map Features: Statistics Canada custom tabulation(s) from 2001 Census  
Amalgamated Neighbourhoods: Ontario Early Years Niagara Region & UBY, 2007  
Produced by: UBY & Offord, 2007  
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# Digging Deeper...

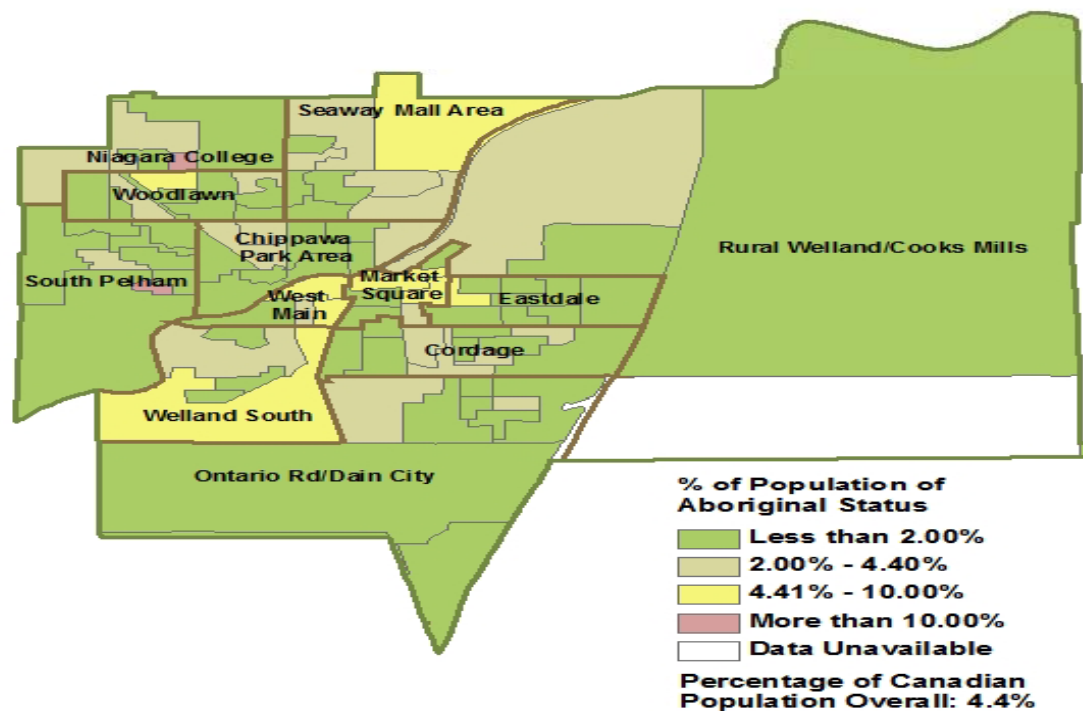
**% Poor/Very Poor in Welland - Communication Skills & General Knowledge**

- Knowledge about the world
- Ability to articulate clearly, without vocal substitution
- Ability to understand what is being said
- Ability to communicate own needs
- Ability to take part in imaginative play
- Ability to tell a story
- Ability to listen in English
- Use language effectively in English

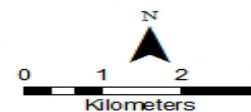


# Looking at Neighbourhoods...

## Aboriginal Population in Welland

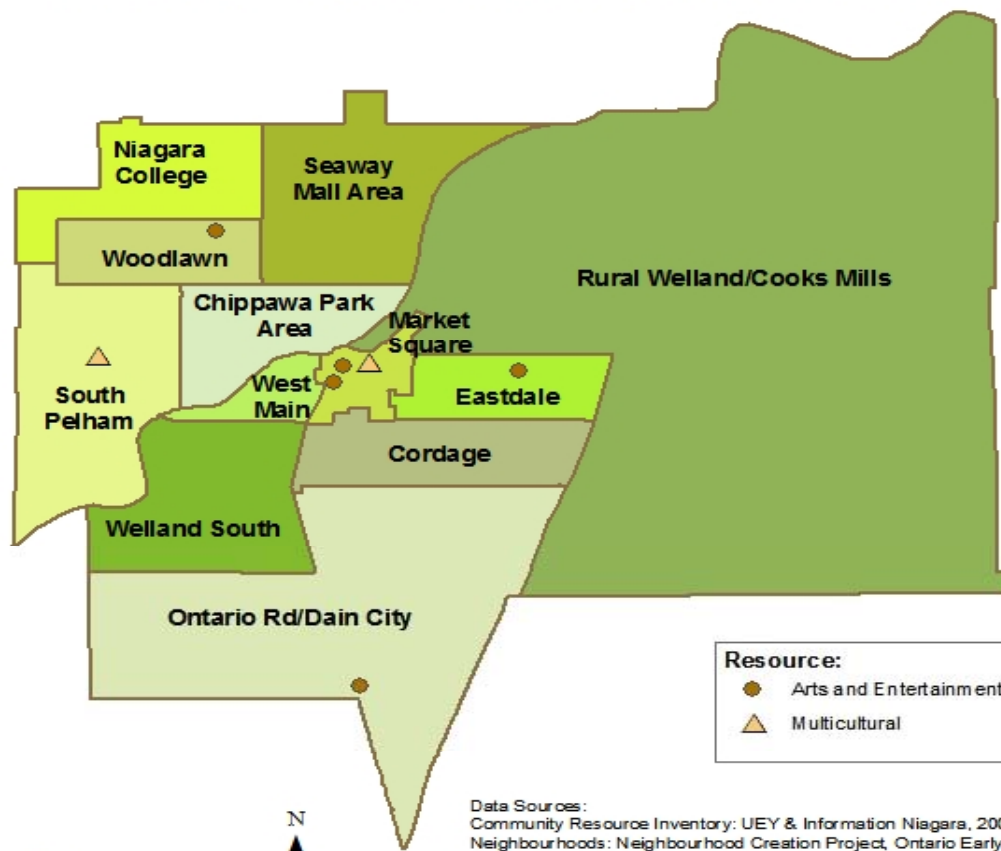


Data Sources:  
Base Map Features: Statistics Canada custom tabulation(s) from 2001 Census  
Neighbourhoods: Neighbourhood Creation Project, Ontario Early Years Niagara Region, 2006  
Produced by: UEY & Offord, 2007  
© 2007 - UEY/ECCDC



# Looking at Neighbourhoods...

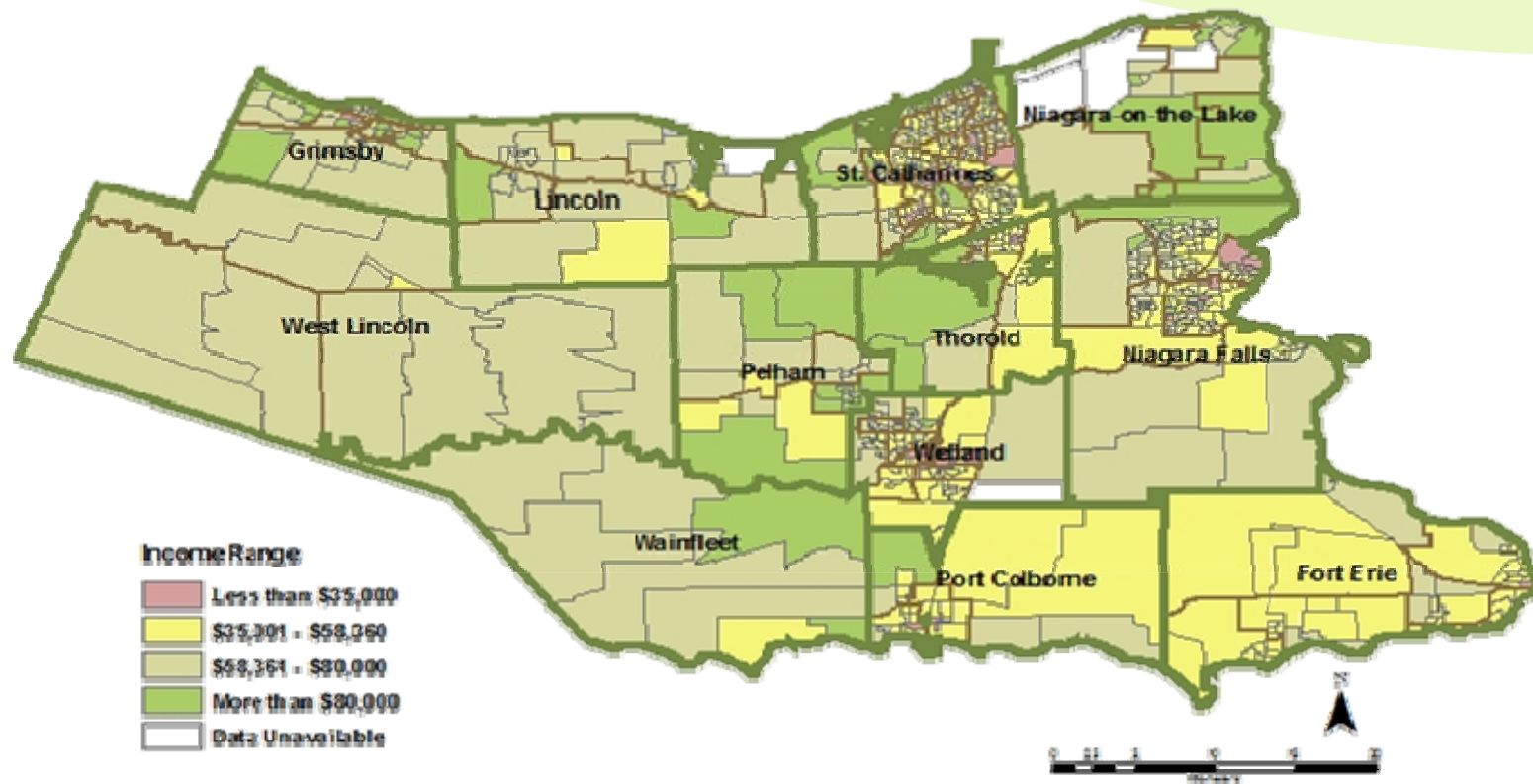
Arts, Entertainment, and Multicultural Resources in Welland



Data Sources:  
Community Resource Inventory: UEY & Information Niagara, 2006  
Neighbourhoods: Neighbourhood Creation Project, Ontario Early Years Niagara Region, 2006  
Base Map Features: Statistics Canada custom tabulation(s) from the 2001 Census  
Produced by: UEY & Offord, 2007  
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# Socioeconomic Data-2001 Census

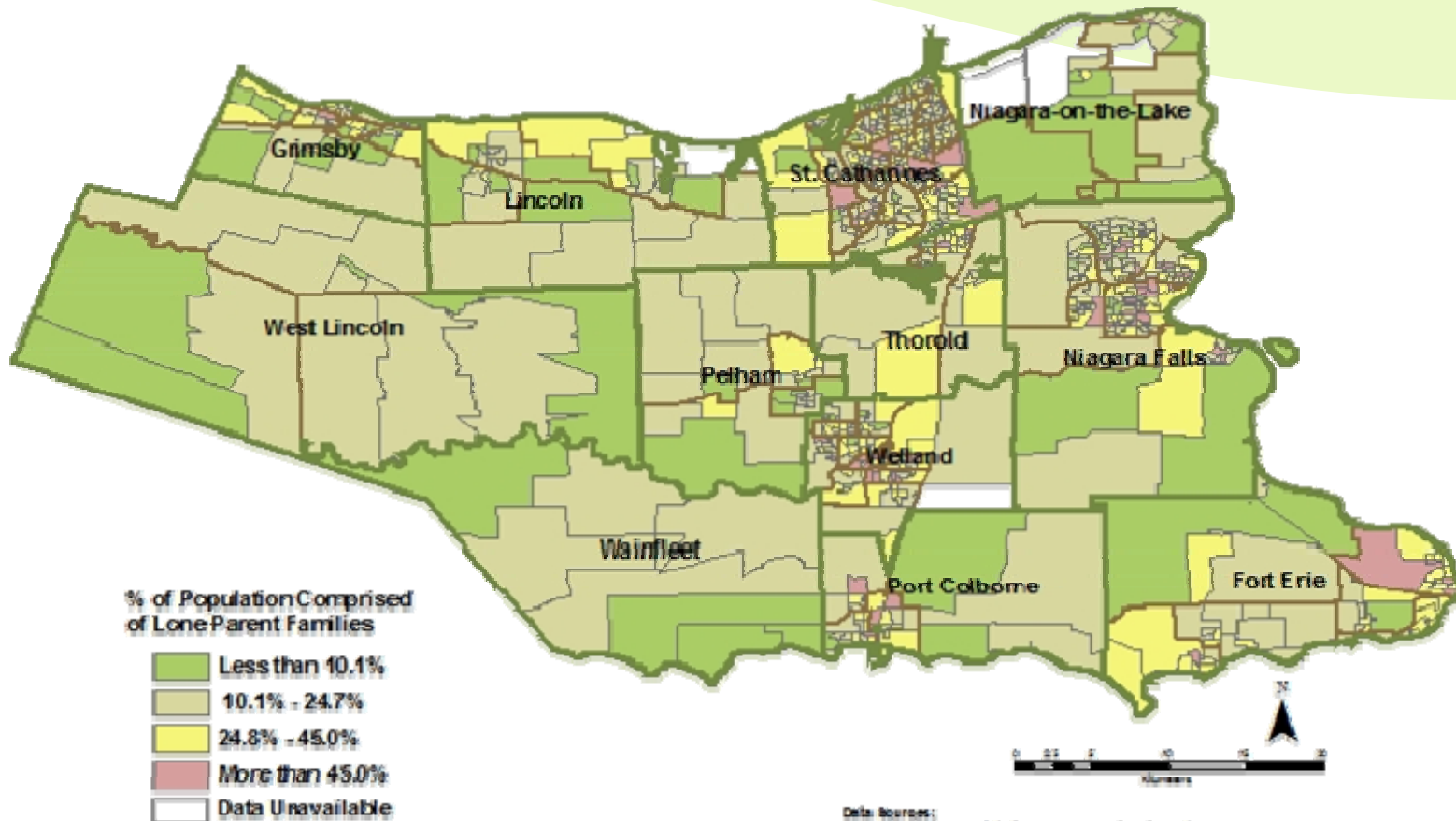
Average Household Income in Niagara Region



Data Source:  
Base Map Features: Statistics Canada custom labelation(s) from 2001 Census  
Neighbourhoods/Neighbourhoods Project © Statistics Canada Early Years Neighbourhood Region, 2006  
Produced by UEX & Oxford, 2007  
© 2007 UEX & Oxford

# 2001 Census

## Family Structure in Niagara Region

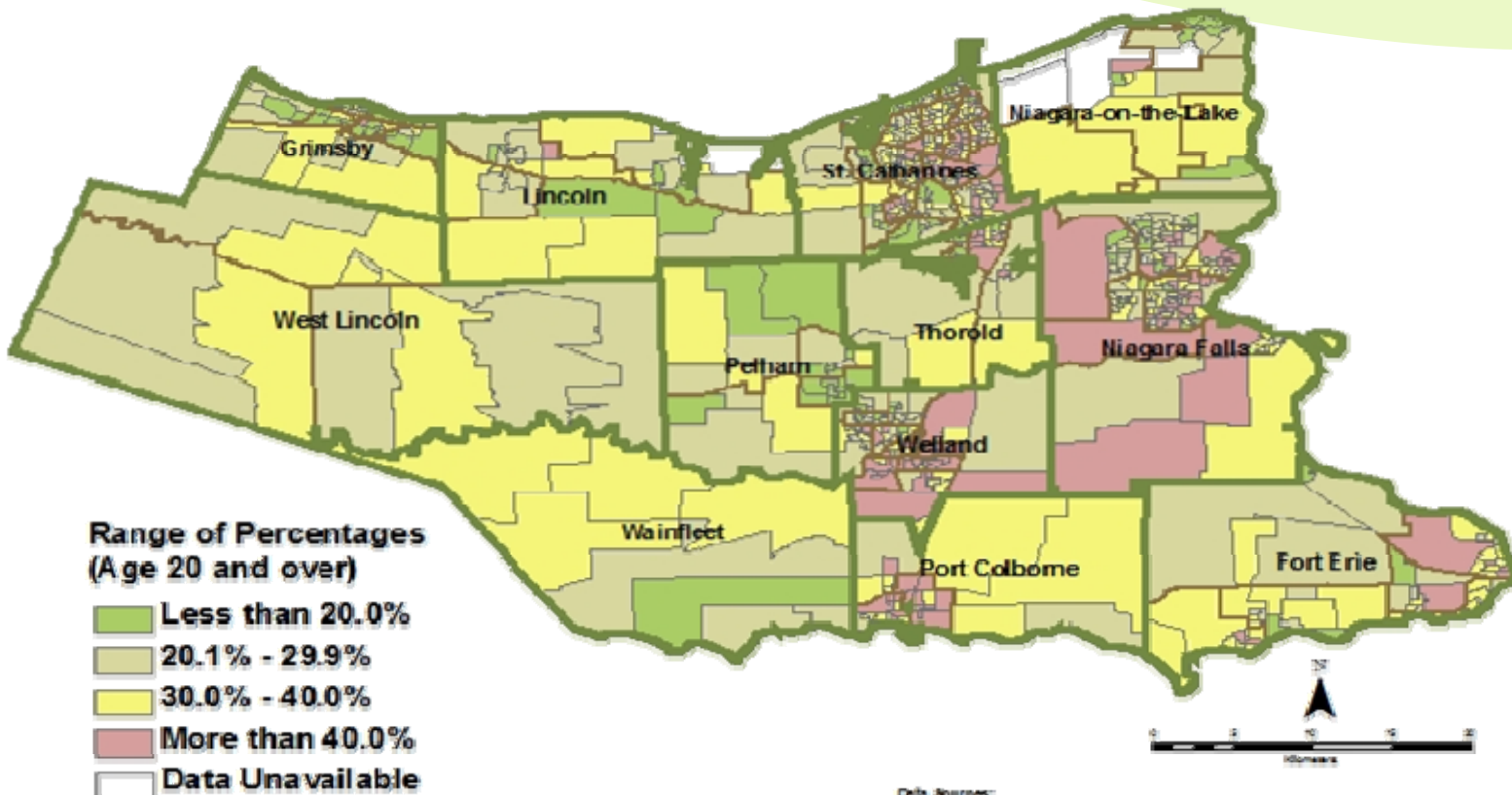


National Rate: 24.7%

Data sources:  
Base map features: Statistics Canada custom tabular data from 2001 Census  
Neighbourhoods: Neighbourhood Creation Project, Ontario Early Years Niagara Region, 2006  
Produced by: UEY & Offord, 2007  
© 2007 - UEY/ECCOQ

# 2001 Census

## % of Niagara Region Population without High School



### Range of Percentages (Age 20 and over)

- Less than 20.0%
- 20.1% - 29.9%
- 30.0% - 40.0%
- More than 40.0%
- Data Unavailable

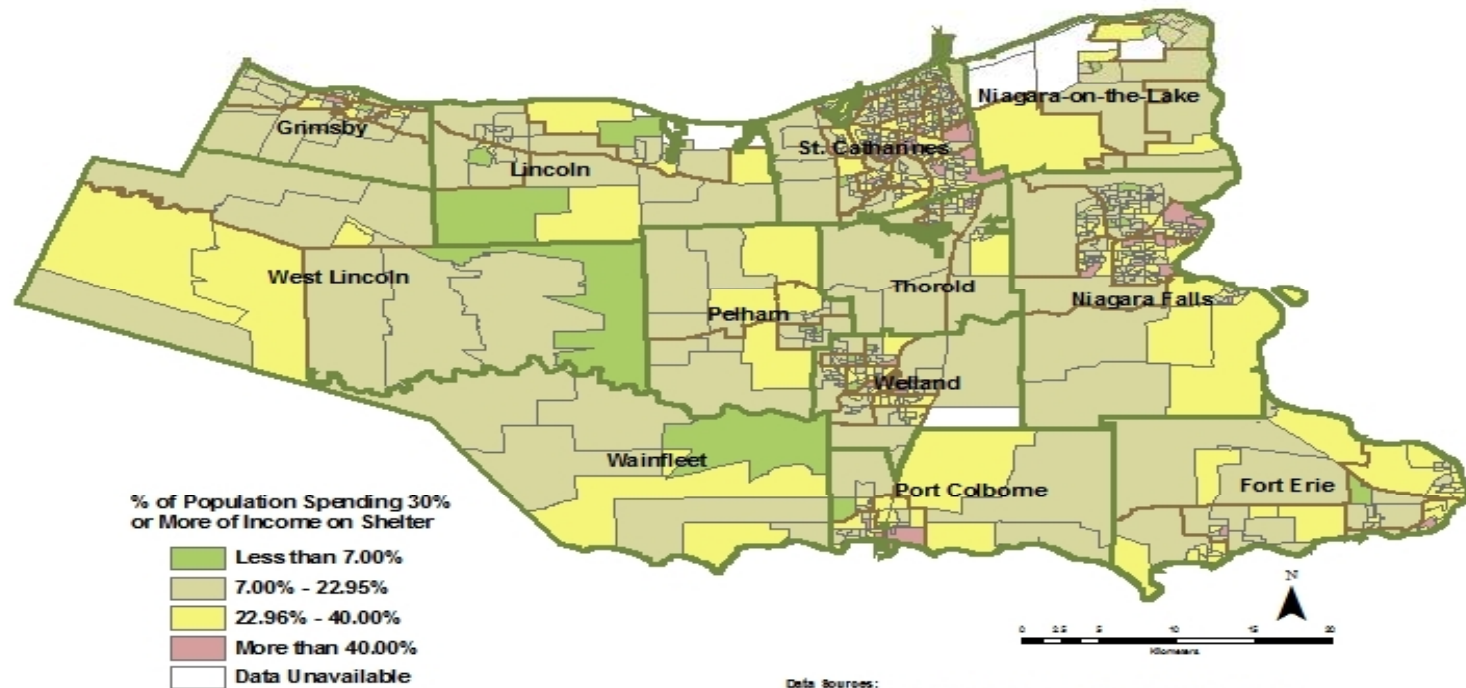
National Rate: 29.9%

Data Sources:  
Base Map Features: Statistics Canada custom labels from 2001 Census  
Neighborhoods: Neighbourhood Creation Project, Ontario Early Years, Niagara Region, 2008  
Produced by: UEY & Offord, 2007  
© 2007, UEY/EOCOC



# 2001 Census

## Housing Stress Index in Niagara Region

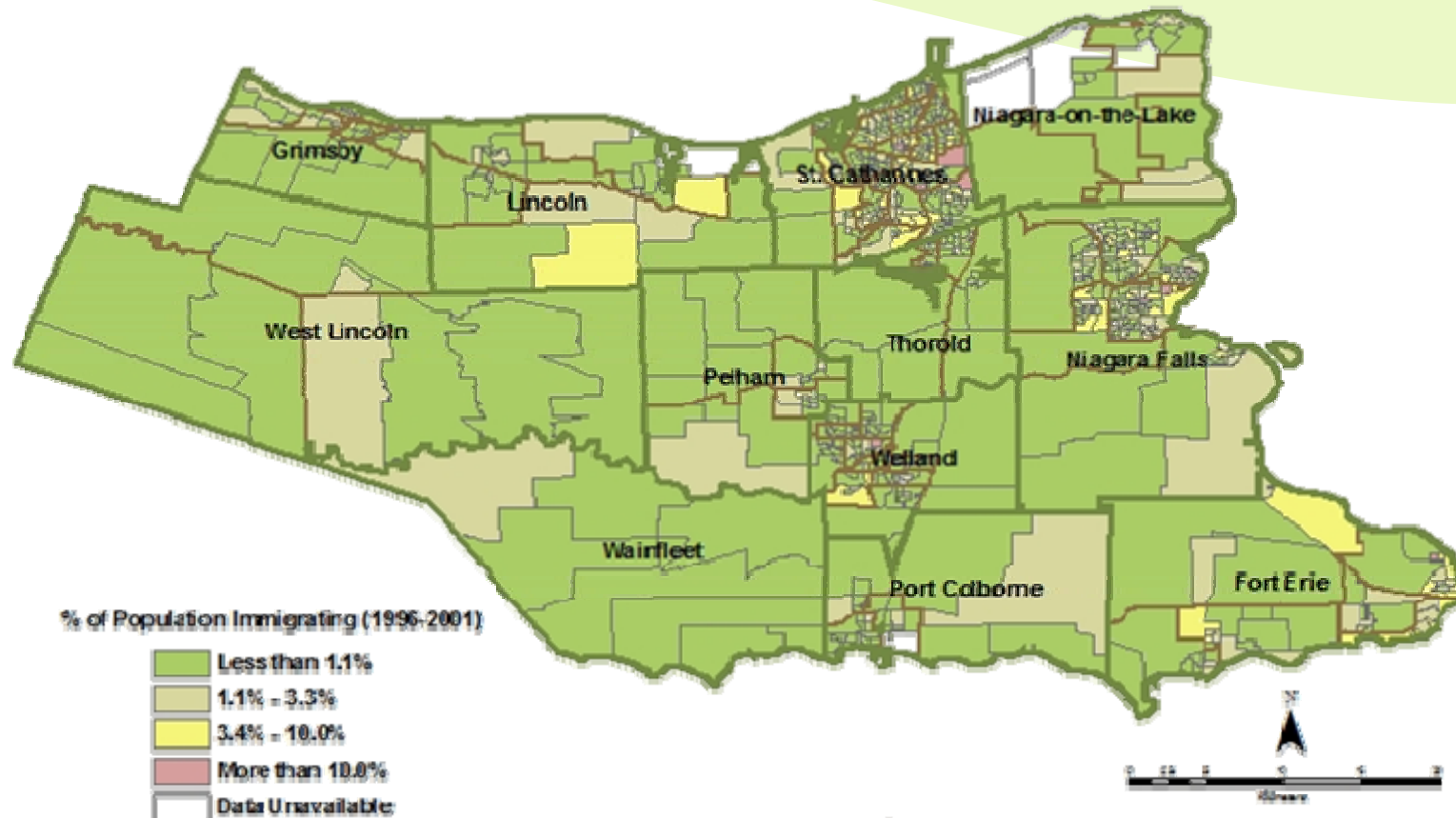


National Rate: 22.95%

Data Sources:  
Base map features: Statistics Canada custom tabular data from 2001 Census  
Neighbourhoods: Neighbourhood Creation Project, Ontario Early Years Niagara Region, 2006  
Produced by: UEY & Offord, 2007  
© 2007 - UEY/EDC/DCC

# 2001 Census

## Immigration in Niagara Region

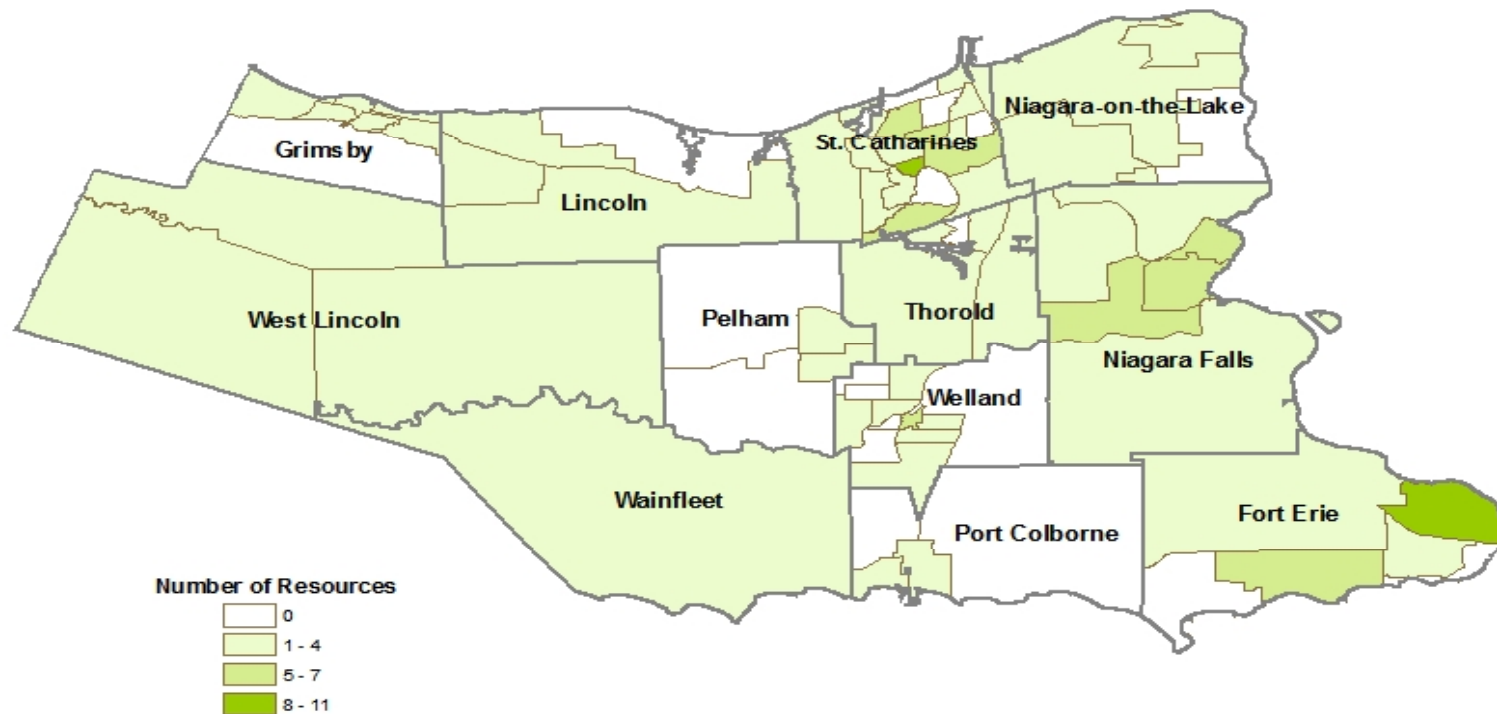


**Rational Rate: 3.3%**

**Data Sources:**  
Base Map Features: Statistics Canada custom (tabulation) from 2001 Census.  
Neighborhoods: Neighborhood Creation Project (Ontario Early Years, Niagara Region, 2006)  
Produced by: U.E.V.S. Office, 2007  
© 2007 - U.E.V.S. Inc.

# 2007 Community Resource Inventory

Distribution of Education Resources in the Niagara Region



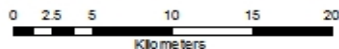
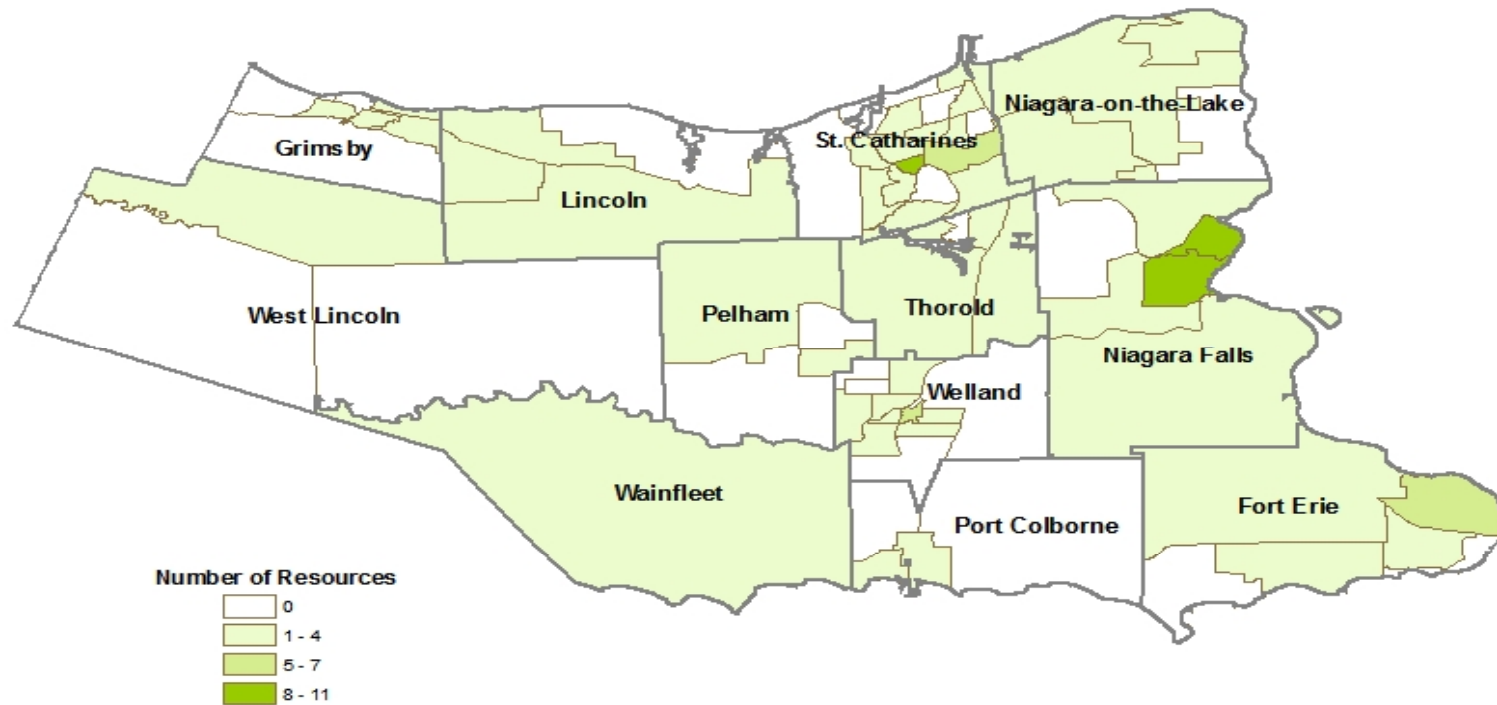
0 2.5 5 10 15 20  
Kilometers



Data Sources:  
Community Resource Inventory: UEY & Information Niagara, 2006  
Neighbourhoods: Neighbourhood Creation Project, Ontario Early Years Niagara Region, 2006  
Base map features: Statistics Canada custom tabulation(s) from 2001 Census  
Produced by: UEY & Offord, 2007  
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# 2007 Community Resource Inventory

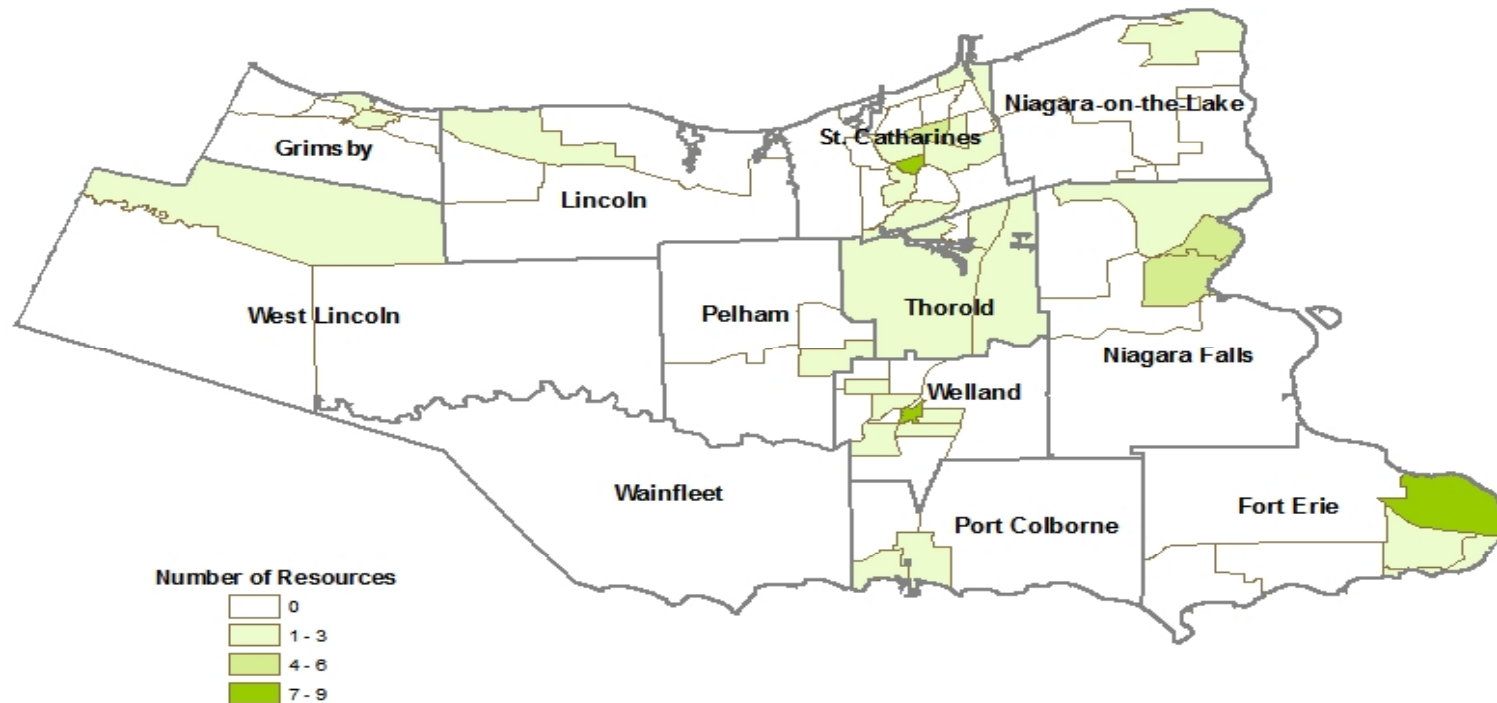
**Distribution of Health and Wellness Resources in the Niagara Region**



Data Sources:  
Community Resource Inventory: UEY & Information Niagara, 2006  
Neighbourhoods: Neighbourhood Creation Project, Ontario Early Years Niagara Region, 2006  
Base map features: Statistics Canada custom tabulation(s) from 2001 Census  
Produced by: UEY & Oford, 2007  
© 2007 - UEY/ECCDC

# 2007 Community Resource Inventory

Distribution of Social Resources in the Niagara Region



Number of Resources

0
1-3
4-6
7-9

0 2.5 5 10 15 20  
Kilometers



Data Sources:  
Community Resource Inventory: UEY & Information Niagara, 2006  
Neighbourhoods: Neighbourhood Creation Project, Ontario Early Years Niagara Region, 2006  
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# Niagara Summary

- **Almost 1 in 4 Niagara children 'not ready for learning' and vulnerability is widely dispersed**
- **Larger %'s of children living in poverty and/or lone parent families are scoring vulnerable**
- **However, the largest # of children at risk live in middle/upper income, two-parent families**
- **Therefore, 'universal' services as opposed to targeted ones seem in order**
- **Currently a variety of initiatives addressing quality child care (QCCN), child poverty (RMN) and municipal /neighbourhood needs**

# What else seems to help?

- Canadian children who received high quality early childhood education enjoyed academic advantages that were apparent as early as grades one and two (n=10,600).
- The findings were consistent no matter what the mother's education level or the child's socio-economic background.
  - ~ National Longitudinal Study of Children & Youth, HRSDC (1999).
- At-risk children who've had early childhood education have 30% more high school completions and 50% fewer arrests than those who don't.
  - ~ Family & Work Institute, New York (1997).

# Use of UEY Data in Niagara

- PD needs identified and sessions provided
- School Board and service delivery planning influenced
- Regional and neighbourhood needs identified and used in community plans
- New programs developed, existing ones revised
- New resources allocated, existing re-allocated
- Successful proposals, grants, and reports written
- Research, event, training, and product development partnerships formed
- Community action inspired
- New resources provided to parents and early years professionals



# Closing Reflection...

**“It is one of the greatest of contemporary social injustices that people who live in the most disadvantaged circumstances have more illnesses, more disability and shorter lives than those who are more affluent.”**

~ Benzeval, Judge, & Whitehead, 1995, p. xxi, Tackling Inequalities in Health: An Agenda for Action.



The early years and your efforts on behalf  
of children matter!

*~ Glory*