WINDSOR-ESSEX QUALITY OF LIFE INDEX

Project Report

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FUNDING PROVIDED BY
PATHWAY TO POTENTIAL
County of Essex
The City of Windsor Ontario, Canada

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ACKNOWLEDGEMENTS

The Windsor-Essex Quality of Life Index was developed recognizing the valuable past and present contributions of First Nations – including The Three Fires Confederacy of First Nations (Ojibway, Odawa and Potawatomie Peoples), the Caldwell First Nation and other First Nations – on the traditional territories upon which the City of Windsor and County of Essex is located.

The Windsor-Essex Quality of Life Index is a product of the diverse perspectives, dedication and collaboration amongst community members within the Windsor-Essex region and across Canada. The City of Windsor - Social Policy & Planning team is grateful for the partners and contributors who provided feedback, subject-matter expertise, resources and support in the development of the index, including:

- Windsor-Essex residents
- County of Essex
- City of Windsor – (Housing Services, Community Safety & Well-Being, Children's Services, Employment & Social Services, Culture, Planning and Information Technology)
- Municipality of Lakeshore – Recreation & Planning
- Town of Essex – Recreation
- Town of LaSalle – Recreation
- Town of Tecumseh – Recreation
- Workforce Windsor-Essex
- United Way of Windsor/Essex County / ProsperUs
- Windsor-Essex County Health Unit
- Windsor Police Services
- Ontario Provincial Police
- 211 Ontario
- Tamarack Institute
- City of Calgary – Community Strategies

Social Policy & Planning would like to express a special thanks for the partnership with the City of Windsor – Geomatics, under the leadership of Carter Day and abilities of Nathan Walschots, whose support, expertise and dedication were instrumental in the development of the Windsor-Essex Quality of Life Index.

PURPOSE OF THIS DOCUMENT

The Windsor-Essex Quality of Life Index was developed to support the Pathway to Potential (P2P) Neighbourhoods Program. The index is a composite score on the quality of life across Windsor-Essex neighbourhoods. Two indices were created: (1) City of Windsor; and (2) County of Essex. For each index, Principal Component Analysis was applied to calculate neighbourhood quality of life scores.

The Project Report details the development and methodology of the Windsor-Essex Quality of Life Index. The report:

- Summarizes the rationale for the Windsor-Essex Quality of Life Index;
- Highlights international, national and local best practices;
- Describes the approach to developing the index;
- Presents an initial development of the index;
- Describes the Windsor-Essex Quality of Life Index use and limitations.

SECTION 1: BACKGROUND

1.1 – A Renewed P2P Strategy

In 2024, City of Windsor and County of Essex Councils adopted a renewed P2P strategy. The renewed strategy recognizes the complexity of poverty beyond financial constraints. Windsor-Essex residents and communities experiencing poverty face an interrelated web of economic, social and environmental inequities, which negatively impact their quality of life and their ability to meaningfully participate in society. The COVID-19 pandemic exacerbated the negative impacts of poverty at the individual and community levels. Feedback from community consultations gathered during the development of the P2P strategy revealed common themes around barriers faced by those living in poverty. These themes included challenges accessing services, affordability and infrastructure gaps.

Through the renewed P2P strategy, City of Windsor and County of Essex Councils remain steadfast in their commitment to reducing poverty within Windsor-Essex. The strategy envisions that "Windsor-Essex County is a thriving community, where residents have access to resources and opportunities to reach their full potential". In alignment with this vision, P2P's investments aim to advance equitable outcomes for Windsor-Essex residents living in poverty. The P2P strategy focuses on three goals:

- Strengthening priority neighbourhoods
- Advancing affordable regional programs
- Measuring regional impact

The goals are supported by 10 initiatives, 29 action items and 26 deliverables. While the goals are mutually reinforcing, key themes that underpin the strategy are the necessity for continued collaboration, resident involvement as an integral part of the decision-making process and applying an equity lens to driving solutions. Through a holistic approach to addressing regional poverty, a thriving Windsor-Essex community can be realized.

1.2 – Addressing Poverty at the Neighbourhood Level

Residents living in poverty experience disparities in the distribution of assets and resources, which negatively impact their ability to access opportunities and to reach their full potential. For example, a lack of access to employment, essential services and recreational opportunities may be underpinned by a lack of infrastructure options, such as affordable housing and transportation. Recognizing that poverty is uniquely experienced by individuals and communities, a goal identified within the P2P strategy is

strengthening priority neighbourhoods.[1] This goal focuses on a place-based approach to addressing poverty. By targeting neighbourhoods with concentrated levels of poverty and poorer quality of life, a place-based approach addresses the unique challenges experienced by residents living within those areas.[2]

The Neighbourhoods Program is a new initiative developed through P2P to advance the goal of strengthening priority neighbourhoods. The Neighbourhoods Program focuses on addressing poverty at a neighbourhood scale. Priority neighbourhoods are defined as under-resourced, experiencing poorer quality of life, and lacking access to services and opportunities to economic, health, environmental and social benefits. The Neighbourhoods Program recognizes that poverty is a negative outcome produced by barriers and challenges unique to the neighbourhood. Through a place-based approach, P2P interventions are targeted at priority neighbourhoods within Windsor-Essex in need of further social investments.[3] `

The program adopts a connected community approach, which focuses on giving residents greater control over their neighbourhood's future and cultivating active resident participation. The connected community approach is a set of principles and practices that help to build meaningful connections between individuals and groups of people. Through this approach, residents play an integral role in the decision-making processes that impact their quality of life.

The goals of the Neighbourhoods Program are to build resilient neighbourhoods and to improve residents' quality of life. The program aims to meet key neighbourhood objectives, which are to activate resources, empower residents and generate social capital. By building resilient neighbourhoods, a thriving Windsor-Essex community where all residents have the resources and opportunities to reach their full potential can be realized.

1.3 – The Windsor-Essex Quality of Life Index

To better understand where priority neighbourhoods exist, the Windsor-Essex Quality of Life Index was developed. The Windsor-Essex Quality of Life Index is a place-based tool that evaluates neighbourhoods based on an overall quality of life score. Development of the index was primarily guided by two resources:

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[1] Bellefontaine,T. and Wisener, R. The Evaluation of Place-Based Approaches: Questions for Further Research. Government of Canada – Policy Horizons Canada, 2011, 5. Draft Outline for Evaluation Discovery Paper (ccednet-rcdec.ca)

[2] Rood, S. and McGroder, S. Promoting Place-Based Strategies to Address Poverty: Exploring the Governor's Role. Washington, D.C.: National Governors Association, 2017, 3-4. 1701PlaceBasedStrategiesPoverty.pdf (nga.org)

[3] Gloger, A., Llanos, E.C., Iveniuk, J., and Modlinska, E. The Connected Community Approach: A Theoretical Framework. Centre for Connected Communities, 3-6. C3-CCA-TheoreticalFramework-180420.indd (connectedcommunities.ca)

World Health Organization's Urban Health Equity Assessment & Response Tool (HEART): Urban HEART is a guide for organizations to develop a health equity index for their respective communities. The tool has been piloted by over 10 countries and leveraged by several Canadian municipalities in developing their neighbourhood equity index, particularly City of Toronto, City of Ottawa and City of Calgary. Urban HEART was used as a guide for developing the methodology for the Windsor-Essex Quality of Life Index.

Government of Canada's Quality of Life Framework: The framework was introduced by the Department of Finance Canada in 2021 and aims to measure what matters most to Canadians through a holistic and comprehensive approach. While the framework is a recent development, the Government of Canada's work with quality of life measurement has been done over decades with the involvement of Canadian governments, academics and citizens. Development of the indicator set within the framework is led by Statistics Canada. The selection of indicators undergoes a rigorous process of research, data quality testing and validation. The framework measures citizen well-being and perceptions on quality of life through 84 indicators spanning across 5 domains: Prosperity, Health, Society, Environment and Good Governance (to view the framework and full list of indicators, please refer to Appendix A – Government of Canada's Quality of Life Framework for Canada).[4] Identification and selection of indicators for the Windsor-Essex Quality of Life Index were primarily guided by the Government of Canada's Quality of Life Framework.

The key features of the Windsor-Essex Quality of Life Index include:

FEATURE	DESCRIPTION
Quality of Life Score	Quality of life scores are calculated at the neighbourhood level. They are based on a set of indicators that aim to measure various dimensions on quality of life. Scores range between 0 and 100, where scores closer to 0 are associated with poorer quality of life within neighbourhoods (greater vulnerability) and scores closer to 100 are associated with greater quality of life. Neighbourhoods closest to 0 are identified as priority.
Indicators	A set of indicators were identified and selected to calculate quality of life scores across Windsor-Essex neighbourhoods. The Government of Canada's Quality of Life Framework helped to guide the identification and selection of indicators. To select an indicator set reflecting the Windsor-Essex community, consultations were also held with local experts, practitioners and community members.
Domains	Domains are broad categories reflecting what matters most to the community. The domains span across various dimensions allowing for a more holistic understanding on what matters most to quality of life. The Windsor-Essex Quality of Life Index adopts the domains within the Government of Canada's Quality of Life Framework: Prosperity, Health, Society, Environment and Good Governance.
Evaluation Methodology (Process)	Quality of life scores are calculated through a statistical approach. The process for calculating scores was guided by the World Health Organization's Urban HEART, as well as neighbourhood equity indices developed by City of Calgary, City of Ottawa and City of Toronto.

[4] Measuring What Matters: Toward a Quality of Life Strategy for Canada. Department of Finance Canada, 2021, 10-14. mwmtqlsc-mqivsqvc-en.pdf

	Key components to calculating the quality of life scores are the geographic unit of analysis, the set of indicators and the statistical analysis.
Maps	To better visualize results, the Windsor-Essex Quality of Life Index is displayed on maps. The maps display quality of life scores across Windsor-Essex neighbourhoods, where scores are represented through a colour scheme.

1.4 – Consultations

Development of the index was completed through a targeted consultation process. Consultations were conducted with residents, experts and practitioners across Windsor-Essex, including municipal departments, non-profit agencies, public health, and other regional stakeholders. The insights and feedback received from the consultations assisted with refining indicator selection, validating neighbourhood boundaries, ensuring the index's application is appropriate for the regional context, and ensuring its replicability and use over time.

Stakeholders external to the Windsor-Essex region were also consulted, including Tamarack Institute and the City of Calgary. Consultations with external stakeholders assisted with sharing best practices in neighbourhood strategies and community development approaches. The City of Calgary, for example, developed a Neighbourhood Equity Index, which is a tool used to assist with advancing equitable outcomes across neighbourhoods in Calgary. Feedback received from consultations provided guidance in the development of the Windsor-Essex Quality of Life index.

The Windsor-Essex Quality of Life Index builds on existing work and serves as a holistic, evidence-based model. The index is a useful tool that can be used as a starting point for service planning purposes and to support decision-making. The index can be used for monitoring and identifying areas of vulnerability across Windsor-Essex neighbourhoods and targeting services and coordinating actions to improve quality of life for Windsor-Essex residents.

SECTION 2: METHODOLOGY

2.1 - Geographic Unit of Analysis

2.1.1 - Windsor & Essex County Distinctions

The Windsor-Essex Quality of Life Index measures quality of life across neighbourhoods within the Windsor (Census Metropolitan Area) CMA. The Windsor CMA is a mix of various census subdivision (CSD) types[5]:

Census Subdivision	Type	Population (2021 Census)
Windsor	City	229,660
Leamington	Municipality	29,680
LaSalle	Town	32,721
Amherstburg	Town	23,524
Kingsville	Town	22,119
Essex	Town	21,216
Lakeshore	Town	40,410
Tecumseh	Town	23,300

While the City of Windsor is governed by the City of Windsor Council, Essex County is governed through a two-tier government. The mayors and deputy mayors across County municipalities serve on the County of Essex Council.[6] County municipalities include Leamington, LaSalle, Amherstburg, Kingsville, Essex, Lakeshore and Tecumseh.

Differences in the socio-economic and physical landscapes between the City of Windsor and County municipalities were considered in the development of the index. In identifying rural and urban areas across Ontario municipalities, Rural Ontario Institute (ROI) classified all municipalities within Windsor CMA as urban. This was the result across various classification approaches, which measured population size, access to services and proximity to population centres. The exception was population density, which identified 6 out of the 8 municipalities as rural (the two classified as urban were Windsor and LaSalle). ROI's evaluation exhibits that while County municipalities have urban traits (for example, a population centre is located within each municipality), they also have rural characteristics as revealed by the population density.

[5] Focus on Geography Series, 2021 Census - Windsor (Census subdivision) (statcan.gc.ca)
[6] County Government - County of Essex

The urban and rural distinctions across Windsor-Essex is important as it impacts residents' quality of life in significantly different ways.[7]

Due to differences in community characteristics between the City of Windsor and Essex County municipalities, a decision was made to evaluate neighbourhoods in two separate indices: an index for the City of Windsor and an index for Essex County. While the quality of life domains applies to both indices, the selected indicators differ and consider the differences in how quality of life may be experienced between residents within the City and County. Additionally, while the same methodology was applied to calculate quality of life scores, independent analyses were performed for each index.

2.1.2 - Dissemination Areas

Quality of life scores are calculated at the Census dissemination area (DA) level, which is defined by Statistics Canada as "a small, relatively stable geographic unit(s) composed of one or more adjacent dissemination blocks with an average population of 400 to 700 persons".[8] The DA boundary was selected for several reasons. The DA provides consistency with the unit of measurement over time; enables data insights at a greater local granularity; better captures distinct communities; provides the opportunity to aggregate scores to other geographic, service planning and administrative boundaries (i.e., census tracts, wards, planning districts); and generally follows permanent and visible features such as roads, railways, water features and power transmission lines.

2.1.3 - Social Planning Districts

To help inform service planning purposes, social planning districts were created. Social planning districts (SPDs) are neighbourhood boundaries created through spatially constrained multivariate clustering (SCMC). SCMC is a method of grouping adjacent dissemination areas together based on the following criteria:

- Similar quality of life scores
- Population size of 1,500 – 7,500
- Each social planning district is made up of unique DAs (in other words, a DA is not represented in more than one social planning district)

Social planning districts help to inform local service planning utilizing quality of life indicators. The identified districts, however, are not definitive statements of where a neighbourhood starts or ends. Social planning districts may cut across multiple distinct communities, administrative boundaries (i.e., municipal, wards) and the historical context within a geographic area. In identifying the social planning districts in Essex

[7] Geographies | Tableau Public

[8] Dictionary, Census of Population, 2021 – Dissemination area (DA) (statcan.gc.ca)

County, for example, some district boundaries cut across multiple municipal boundaries. Similarly, some district boundaries in Windsor cut across multiple ward boundaries. This approach was intentional to maintain the integrity of the boundaries for identifying areas of need and to remain consistent with Windsor and Essex County distinctions. In total, 94 social planning districts were identified across Windsor-Essex County – 52 social planning districts were identified in Windsor and 45 were identified in Essex County:

Population Size	Windsor	Essex County
Below 1,499	1	1
1,500 – 2,499	15	10
2,500 – 4,999	12	18
5,000 – 7,500	24	16
Total	**52**	**45**

To better identify social planning districts and evaluate districts over time, a naming convention was developed for each region. The naming convention begins with the first letter of the region (Windsor and Essex County), followed by a number. For example: W1. The number ranges from 1 to the maximum total of social planning districts for the region.

The Windsor-Essex Quality of Life Index maps quality of life scores for each social planning district on a scale between 0 – 100, where scores closer to 0 are associated with poorer quality of life and scores closer to 100 are associated with higher quality of life.

2.1.4 - Community Services Areas (CSAs)

Community Service Areas (CSAs) are priority neighbourhoods identified for further investment through the Neighbourhoods Program. CSAs are created using the following criteria:

- Located within social planning district boundaries
- Made up of more than one DA to the maximum of all the DAs within a single social planning district
- Within a social planning district identified as below than the average quality of score (based on standard deviation)
- Within a social planning district with the lowest quality of life scores
- Consideration of physical features such as roads, railways, parkland and water features

2.2 – Guiding Principles

Indicators selected for the Windsor-Essex Quality of Life Index follow a set of guiding principles:

- Readily available and accessible – Is data readily available and easily accessible for Windsor-Essex at a disaggregated or dissemination area level? Does data have to be transformed? Data that required complex transformations were not used.
- Comparability – Can data be replicated and compared over time?

- Representativeness – Is data representative of the Windsor-Essex region? Is it relevant for describing neighbourhood outcomes?
- Quality – Is data complete (i.e., for all areas within Windsor-Essex)? Are there any missing values? Are the methods to collect the data or calculate the values consistent? Does data follow quality standards?
- Validity – Is data collected from a reliable source? Has the data been vetted by appropriate local and national authorities and experts?
- Variability – Is there enough variability of values to describe differences between neighbourhoods across Windsor-Essex?

2.3 – Developing the Quality of Life Index

Quality of life scores are composite scores using Principal Component Analysis (PCA) with varimax rotation. PCA is a statistical method that reduces the dimensionality of a complex dataset while keeping the important relationships within the underlying structure. PCA evaluates the relationships (correlation) between and amongst variables along multiple dimensions. Based on the variables and their relationships with each other, PCA summarizes them into a new set of variables called principal components. Principal components capture the variance in the data (eigenvalue). Each principal component explains the maximal amount of variance across an uncorrelated group of variables. The first principal component captures the most variation in the data across specified variables. With each successive principal component, less variation is captured. The advantages of PCA are that it reduces the size of the dataset without losing important information and enables to understand important differences across neighbourhoods (dissemination areas).

The following method was applied to develop the Windsor-Essex Quality of Life index:

1. Select indicators
2. Standardize indicators
3. Weight indicators
4. Calculate total quality of life scores
5. Benchmarking procedure
6. Verification

2.3.1 – Select Indicators

Indicators were identified through referencing the Government of Canada's Quality of Life framework and existing neighbourhood equity indices. Consultations with local experts, practitioners and members of the public were also held to identify indicators that reflects the Windsor-Essex community. A list of indicators was identified through these processes:

DOMAIN	INDICATOR	
Prosperity	• Population on social assistance • Access to high-speed internet • Housing affordability • Ratio of single-dwelling households to apartments • Rent-geared-to-income housing	• Core housing need • Employment income • Ratio of renters to owners • Food security • Youth not in employment, education and training (NEET)
Health	• Marginalization • Access to health eating environments • Commuters using active transport • Access to healthcare services • Percentage of children receiving well-baby check-ups	• Affordable healthcare • Mental health and addictions outpatient visits • Percentage of people rostered to a primary care provider
Society	• Access to recreational amenities • Knowledge of official languages	• Average commuting time
Environment	• Access to active transportation • Access to public transit	• Green space • Proximity to essential services and amenities
Good Governance	• Voter turnout • Incidence of property-related crime	• 211 information requests • 311 service requests

The final indicator set was selected through availability and accessibility to data, as well as the guiding principles highlighted in Section 2.2. A set of 18 quality of life indicators was selected for the Windsor index and 14 indicators for the Essex County index. *Figure 1 – Selected Indicator Set* lists the indicators selected for each index.

Figure 1 – Selected Indicator Set

PROSPERITY Being able to afford basic goods and services, such as food, housing and utilities is essential for quality of life.		
Indicator	**Windsor**	**Essex County**
Population on social assistance	●	●
Access to high-speed internet	●	●
Housing affordability	●	●
Core housing need	●	●
Employment income	●	●
HEALTH Health plays an important role in shaping quality of life and the conditions that residents grow, live, work and age. Accessing health and health-related resources and opportunities lays a foundation for healthy living.		
Indicator	**Windsor**	**Essex County**
Marginalization	●	●

Access to healthy eating environments	●	●
Access to emergency services	●	●
Commuters using active transport	●	●
SOCIETY Time and opportunity to develop relationships with families, friends, neighbourhoods and colleagues is essential for an individual's personal development, as well as for community vitality.		
Indicator	**Windsor**	**Essex County**
Indoor recreational amenities	●	●
Knowledge of official languages	●	●
Average commuting time	●	●
ENVIRONMENT The built and natural environment (such as parks and walkable communities) are aspects of daily life that shape the human experience and impact quality of life in significant ways.		
Indicator	**Windsor**	**Essex County**
Access to active transportation	●	●
Access to public transit	●	●
Green space	●	●
Proximity to essential services and amenities	●	●
GOOD GOVERNANCE Having trust in public institutions is a critical foundation for residents to feel safe with accessing public services and making their voices heard.		
Indicator	**Windsor**	**Essex County**
Incidence of property-related crime	●	●
211 information requests	●	●
311 service requests	●	●

● = Indicator included, ● = Indicator not included

Indicators that were identified and considered were not included in the final indicator set largely due to lack of data availability, accessibility, quality and completeness of data. Urban HEART recommends that to remain rooted in sound evidence, transparency and completeness of data are critical. Lack of data availability and accessibility, however, limits meeting these criteria for some indicators. For example, the completeness of affordability should include transportation affordability. Along with housing costs, transportation costs are a major portion of total household costs. Data for transportation affordability, however, is not readily available. Despite the indicator not reflecting a complete picture of affordability, housing affordability (represented by the indicator proportion of owner and renter households spending 30% or more on shelter costs) is an important indicator impacting quality of life and therefore, was kept in.

Other indicators have a similar rationale for being included in the index. While an indicator may not completely represent a dimension of quality of life, the indicator was identified as important through the Quality of Life Framework, Urban HEART or by Windsor-Essex community members. A detailed breakdown of the final indicator set is available in Appendix A – Detailed Indicator Set.

2.3.2 – Standardize Indicators

Units of measurement vary across indicators. For example, indicators such as access to active transportation is expressed in kilometres, where a higher value is associated with greater quality of life. On the other hand, some indicators are expressed as calculations, such as marginalization, where a higher value is associated with poorer quality of life. To allow for measurement across disparate indicators, values are standardized to a common range and direction. The standardized range falls between 0 and 1, where values closer to 1 are associated with greater quality of life and values closer to 0 are associated with poorer quality of life. Indicators are standardized using the following formulas:

Where high values indicate better conditions (i.e., green space), values are standardized by applying:

$$\frac{x - min}{\max - min}$$

Where 'x' is each DA's value and 'min' and 'max' are the overall minimum and maximum values.

Where high values indicate poorer conditions (i.e., poverty rate, marginalization), values are standardized by applying the opposite formula:

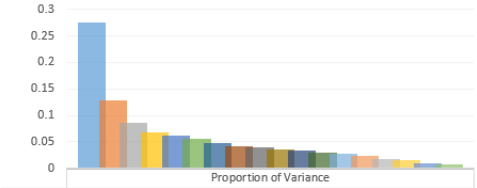
$$\frac{\max - x}{\max - min}$$

2.3.3 – Weight Indicators

PCA was performed with the statistical programming language, R, and leveraged the psych/psychTools library. PCA was performed for each index with the selected indicators as highlighted in *Figure 3 – Selected Indicator Set*. The PCA results for Windsor produced 18 principal components. However, only the first 4 principal components, which represented more than 50% of all data variance, were retained. Similarly, the PCA results for Essex County produced 14 principal components, with the first 3 principal components being retained and representing more than 50% of all data variance.

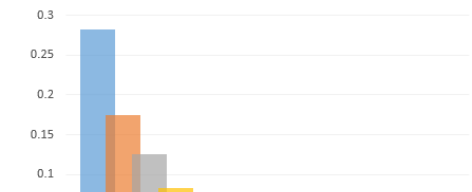
Figure 2 – Scree Plots of Variance (Eigenvalues) and Principal Components

Windsor



	Proportion of Variance
Comp 1	0.2744243
Comp 2	0.1280784
Comp 3	0.08564556
Comp 4	0.0680253
Comp 5	0.06172342
Comp 6	0.05494251
Comp 7	0.04726057
Comp 8	0.04263645
Comp 9	0.03955913
Comp 10	0.03515471
Comp 11	0.03291796
Comp 12	0.02870529
Comp 13	0.02722315
Comp 14	0.02352636
Comp 15	0.01853003
Comp 16	0.01508201
Comp 17	0.009797872
Comp 18	0.006766957

Essex County



	Proportion of Variance
Comp 1	0.2818759
Comp 2	0.1748881
Comp 3	0.1254153
Comp 4	0.08304869
Comp 5	0.06087233
Comp 6	0.05328046
Comp 7	0.04772517
Comp 8	0.04125317
Comp 9	0.03787724
Comp 10	0.03143721
Comp 11	0.02085055
Comp 12	0.01946305
Comp 13	0.01276718
Comp 14	0.009245596

The weight for each indicator was calculated by applying the following steps (calculated separately for Windsor and Essex County):

1. Calculated Indicator Weight $= \Sigma\,(Factor\ Score_{\iota} \times Variance\ Explained_{\iota})$

2. Standardized Indicator Weight $= \dfrac{Indicator\ Weight}{Sum\ of\ Indicator\ Weights}$

The following tables detail the results from the PCA for Windsor and for Essex County.

Figure 3 – PCA Results for Windsor

Domain	Indicator	Factor 1	Factor 2	Factor 3	Factor 4	Weight	Standardized Weight	Standardized Weight (%)
Prosperity	Population on social assistance	0.06	0.57	-0.04	0	1.243	0.062	6.2
	Access to high-speed internet	0.03	0.22	0.86	0	2.258	0.113	11.3
	Core housing need	0.81	0.02	-0.09	0.27	3.638	0.181	18.1
	Employment income	0.83	0.08	-0.08	0.1	3.512	0.175	17.5
	Housing affordability	0.78	0.02	-0.07	0.21	3.438	0.171	17.1
Health	Marginalization	0.84	0.09	-0.12	0.31	3.911	0.195	19.5

	Access to healthy eating environments	-0.52	0.02	0.07	-0.53	-2.962	-0.148	-14.8
	Access to emergency services	-0.33	0.14	-0.01	-0.41	-1.894	-0.094	-9.4
	Commuters using active transport	-0.14	0.03	0.08	-0.65	-1.643	-0.082	-8.2
Society	Indoor recreational amenities	-0.14	-0.1	0.79	0.16	1.15	0.057	5.7
	Knowledge of official languages	0.48	0.04	-0.07	0.44	2.736	0.136	13.6
	Average commuting time	0.71	-0.08	-0.06	-0.35	1.868	0.093	9.3
Environment	Access to active transportation	0.07	-0.86	-0.1	0.13	-1.294	-0.065	-6.5
	Access to public transit	-0.22	0.16	0.68	-0.25	0.284	0.014	1.4
	Green space	0.07	-0.73	-0.28	0.07	-1.527	-0.076	-7.6
	Proximity to essential services and amenities	0.02	-0.02	0.03	0.61	1.322	0.066	6.6
Good Governance	Incidence of property-related crime	0.13	0.28	0.06	0.29	1.752	0.087	8.7
	211 information requests	0.36	0.37	-0.21	0.27	2.263	0.113	11.3
Variance Explained (with Varimax Rotation)		**0.4**	**0.19**	**0.2**	**0.2**			
		4	**1.9**	**2**	**2**			

Figure 4 – PCA Results for Essex County

Domain	Indicator	Factor 1	Factor 2	Factor 3	Weight	Standardized Weight	Standardized Weight (%)
Prosperity	Population on social assistance	-0.05	-0.03	0.95	1.862	0.114	11.4
	Access to high-speed internet	0	0.89	-0.02	2.713	0.167	16.7
	Core housing need	0.83	-0.08	-0.03	3.501	0.215	21.5
	Employment income	0.72	0.08	0.05	3.675	0.226	22.6
	Housing affordability	0.69	-0.07	0.01	2.98	0.183	18.3
Health	Marginalization	0.82	-0.27	0.04	3.027	0.186	18.6
	Access to healthy eating environments	-0.59	0.24	0.06	-1.832	-0.112	-11.2
	Commuters using active transport	-0.66	0.16	0.08	-2.379	-0.146	-14.6
	Knowledge of official languages	0.47	0.08	-0.12	2.134	0.131	13.1
Environment	Access to active transportation	-0.01	-0.83	-0.02	-2.665	-0.164	-16.4
	Green space	0.09	-0.72	-0.01	-1.841	-0.113	-11.3
	Proximity to essential services and amenities	-0.14	0.54	-0.29	0.363	0.022	2.2

Good Governance	Incidence of property-related crime	0.6	0.13	0.02	3.209	0.197	19.7
	211 information requests	-0.08	-0.09	0.95	1.538	0.094	9.4
Variance Explained (with Varimax Rotation)		**0.46**	**0.31**	**0.23**			
		4.6	**3.1**	**2.3**			

2.3.4 – Calculate the Total Quality of Life Score

Scores for each dissemination area were calculated through the following steps, with scores ranging from 0 to 100 and where scores closer to 100 is associated with greater quality of life:

$$\text{Quality of Life Score}_{DA} = \Sigma\,(Indicator\ Score \times Indicator\ Weight)$$

Each score was standardized to a range of 0.00 to 100.00:

$$\text{Quality of Life Score}_{DA} = (1 - Weighted\ Score_{DA}) \times 100$$

Dissemination areas were then evaluated using spatially constrained multivariate clustering (SCMC) to group adjacent dissemination areas with similar scores and other criteria (please refer to *Section 2.1.3 - Social Planning Districts*). The grouped dissemination areas form the social planning districts. The scores from each DA within a social planning district were used to calculate an average quality of life score for the district. The quality of life scores of social planning districts were then ranked and mapped.

For each index, the resulting scores for social planning districts were ranked and mapped. The following tables and figures detail the quality of life scores and rankings of social planning districts for each region.

Figure 5 – Quality of Life Scores for Windsor

Rank	SPD	Score	Rank	SPD	Score	Rank	SPD	Score	Rank	SPD	Score
1	W2	4.31	**14**	W10	54.09	**27**	W35	66.92	**40**	W42	80.20
2	W5	23.97	**15**	W29	54.95	**28**	W37	67.33	**41**	W26	81.04
3	W4	25.15	**16**	W31	58.72	**29**	W36	68.39	**42**	W22	82.67
4	W9	26.21	**17**	W32	58.73	**30**	W46	69.03	**43**	W27	83.59
5	W3	31.73	**18**	W1	58.91	**31**	W48	69.62	**44**	W23	83.88
6	W14	40.64	**19**	W15	59.09	**32**	W43	71.56	**45**	W39	84.23
7	W6	41.42	**20**	W28	61.25	**33**	W41	73.75	**46**	W24	84.51
8	W7	43.19	**21**	W50	61.40	**34**	W44	74.73	**47**	W1	85.39

9	W8	43.43	22	W52	63.74	35	W40	75.82	48	W25	86.44
10	W16	47.39	23	W49	63.99	36	W38	76.29	49	W17	87.82
11	W11	48.44	24	W45	64.64	37	W51	77.15	50	W20	88.29
12	W19	52.11	25	W47	64.65	38	W34	78.55	51	W12	89.81
13	W18	52.31	26	W33	65.49	39	W30	79.95	52	W13	92.08

*SPD = Social Planning District

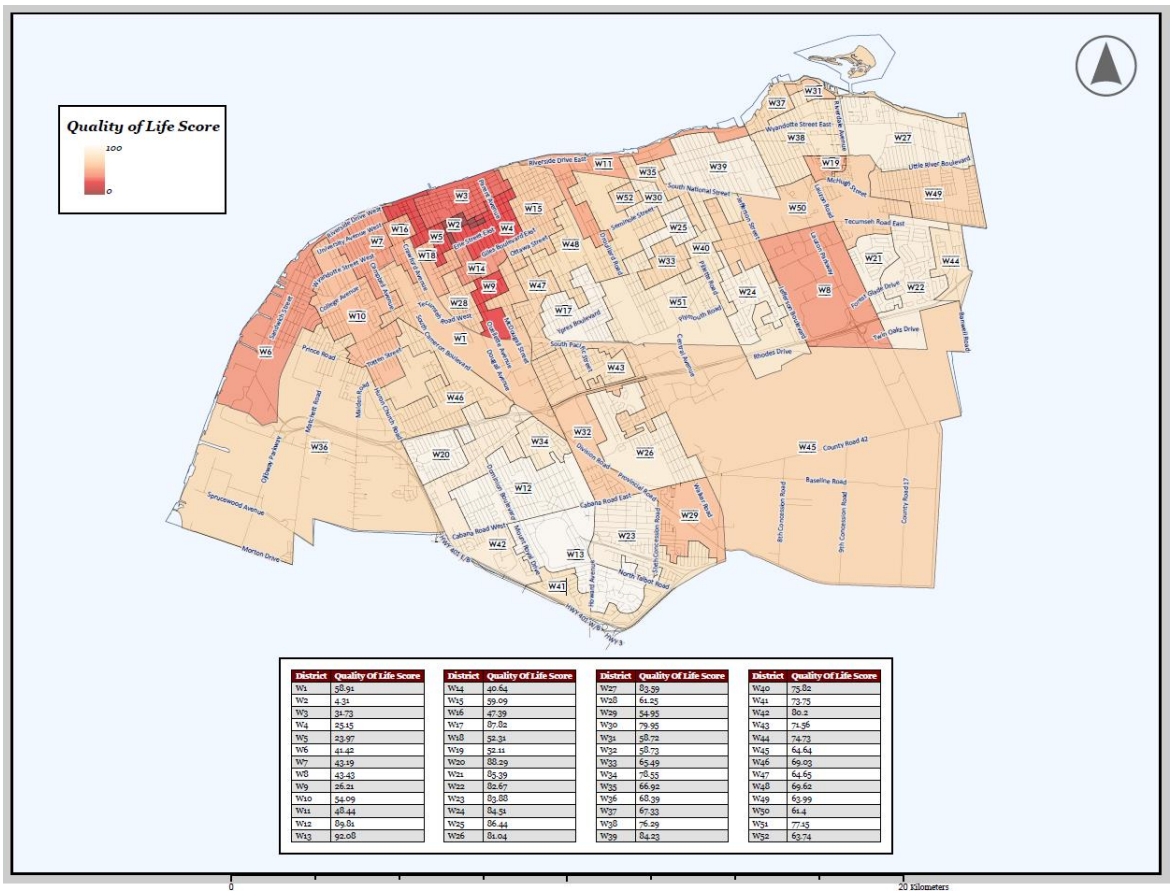
Figure 6 – Quality of Life Scores for Essex County

Rank	SPD	Score	Rank	SPD	Score	Rank	SPD	Score	Rank	SPD	Score
1	E2	18.03	14	E40	55.02	27	E21	69.88	40	E7	79.69
2	E4	28.61	15	E39	56.89	28	E23	70.34	41	E8	80.14
3	E3	29.63	16	E32	58.80	29	E28	70.55	42	E14	80.41
4	E1	38.04	17	E43	59.54	30	E16	71.32	43	E5	81.48
5	E12	39.48	18	E33	61.79	31	E19	72.08	44	E10	82.38
6	E35	41.62	19	E36	62.32	32	E17	72.69	45	E15	85.01
7	E9	43.53	20	E29	63.46	33	E20	73.71			
8	E34	44.64	21	E31	65.10	34	E24	73.97			
9	E37	48.92	22	E42	65.47	35	E11	74.07			
10	E38	49.74	23	E25	65.64	36	E18	76.26			
11	E41	51.49	24	E27	66.74	37	E22	76.38			
12	E36	52.40	25	E30	68.02	38	E13	77.77			
13	E44	52.41	26	E45	68.15	39	E6	78.23			

*SPD = Social Planning District

The maps feature a colouring scheme of 5 tiers to reflect the range of quality of life scores. The darker the shade, the poorer the quality of life score, and vice versa. The darkest shade is associated with quality of life scores closest to 0. The lightest shade is associated with quality of life scores closest to 100.

Figure 7 – Windsor Quality of Life Index Map



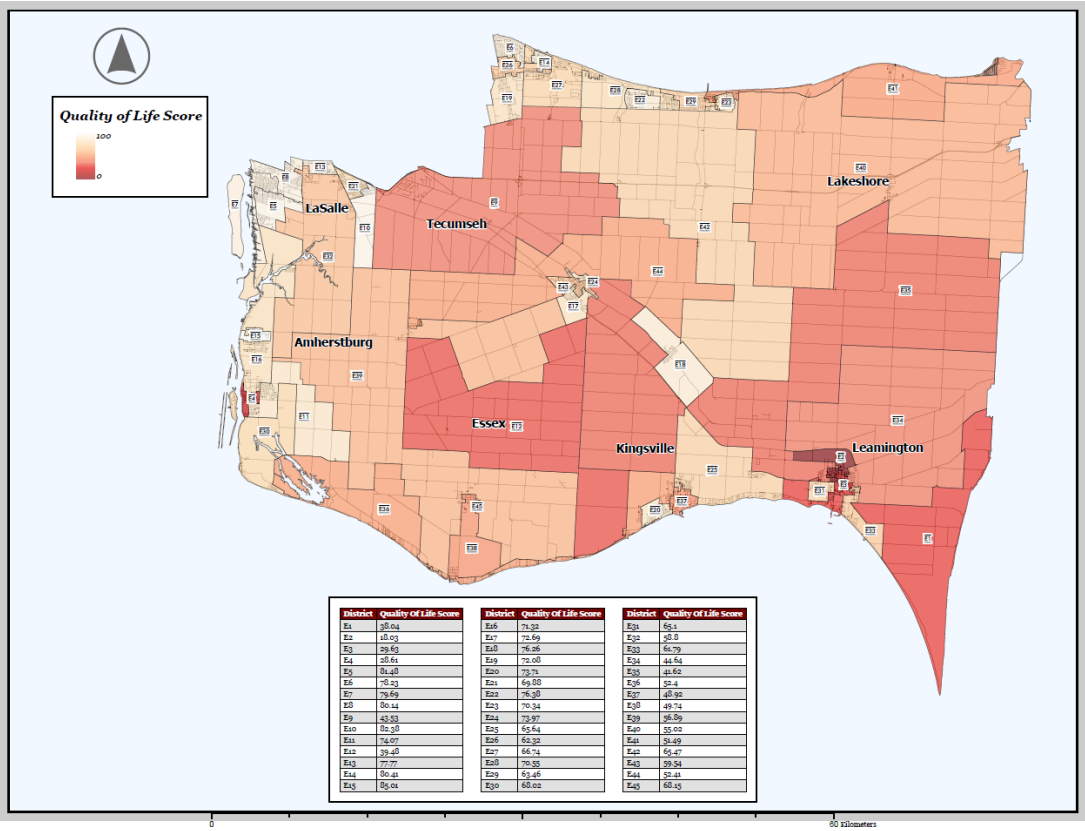
District	Quality Of Life Score
W1	58.91
W2	4.31
W3	31.73
W4	23.15
W5	23.97
W6	41.42
W7	43.19
W8	43.43
W9	26.21
W10	54.09
W11	48.44
W12	89.81
W13	92.08

District	Quality Of Life Score
W14	40.64
W15	59.09
W16	47.39
W17	87.82
W18	52.31
W19	52.11
W20	88.29
W21	85.39
W22	82.67
W23	83.88
W24	84.51
W25	86.44
W26	81.04

District	Quality Of Life Score
W27	83.59
W28	61.25
W29	54.95
W30	79.95
W31	58.72
W32	58.73
W33	65.49
W34	78.55
W35	66.92
W36	68.39
W37	67.33
W38	76.29
W39	84.23

District	Quality Of Life Score
W40	75.82
W41	73.75
W42	80.2
W43	71.56
W44	74.73
W45	64.64
W46	69.03
W47	64.65
W48	69.62
W49	63.99
W50	61.4
W51	77.15
W52	63.74

Figure 8 – Essex County Quality of Life Index Map



District	Quality Of Life Score
E1	38.04
E2	18.03
E3	29.63
E4	28.61
E5	81.48
E6	78.23
E7	79.69
E8	80.14
E9	43.53
E10	82.38
E11	74.07
E12	39.48
E13	77.77
E14	80.41
E15	85.01

District	Quality Of Life Score
E16	71.32
E17	72.69
E18	76.36
E19	72.08
E20	73.71
E21	69.88
E22	76.38
E23	70.34
E24	73.97
E25	65.64
E26	62.32
E27	66.74
E28	70.55
E29	63.46
E30	68.02

District	Quality Of Life Score
E31	65.1
E32	58.8
E33	61.79
E34	44.64
E35	41.62
E36	52.4
E37	48.92
E38	49.74
E39	56.89
E40	55.02
E41	51.49
E42	65.47
E43	59.54
E44	52.41
E45	68.15

2.3.5 - Benchmarking Procedure

The benchmarking procedure identifies the social planning districts that are performing better or worse than average. The objectives of benchmarking are to understand where areas are likely to experience reduced quality of life and where areas experiencing improved quality of life could serve as aspirational targets. The selected benchmarking approach is standard deviation. Standard deviation is a statistic that measures the variability of data around its mean. In relation to quality of life scores, standard deviation measures each social planning district score against the index's average quality of life score. +1.5 standard deviation represents social planning districts that are performing better than the average, while -1.5 standard deviation represents social planning districts that are performing worse than the average. The formula below was used to calculate standard deviation for each social planning district:

$$\sigma = \sqrt{\frac{\Sigma\,(\chi_i - \mu)^2}{\mathrm{N}}}$$

Where σ = standard deviation, N = size of the population, χ_i = each value from the population, μ = the population mean.

The breakdown of social planning districts by their standard deviation is displayed below, followed by maps of Windsor and Essex County social planning districts with standard deviation symbology. Standard deviations also represent a 5-tier neighbourhood classification: thriving, emerging, improving, at risk and priority.

Standard Deviation	Neighbourhood Classification	No. Social Planning Districts	
		Windsor	Essex County
< -1.5	Priority	5	4
-1.5 to -0.50	At Risk	9	9
-0.50 to 0.50	Improving	19	14
0.50 to 1.5	Emerging	0	18
> 1.5	Thriving	19	0
	Total	**52**	**45**

Figure 9 – Windsor Quality of Life Index Map by Standard Deviation (Windsor Only)

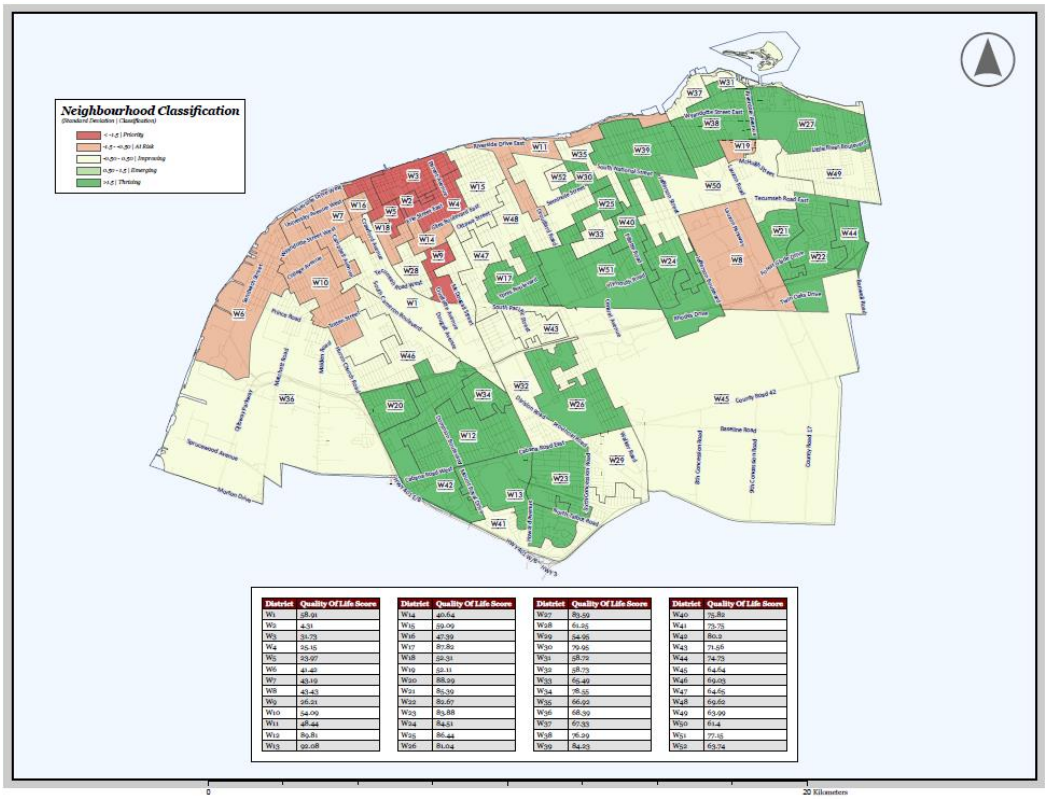
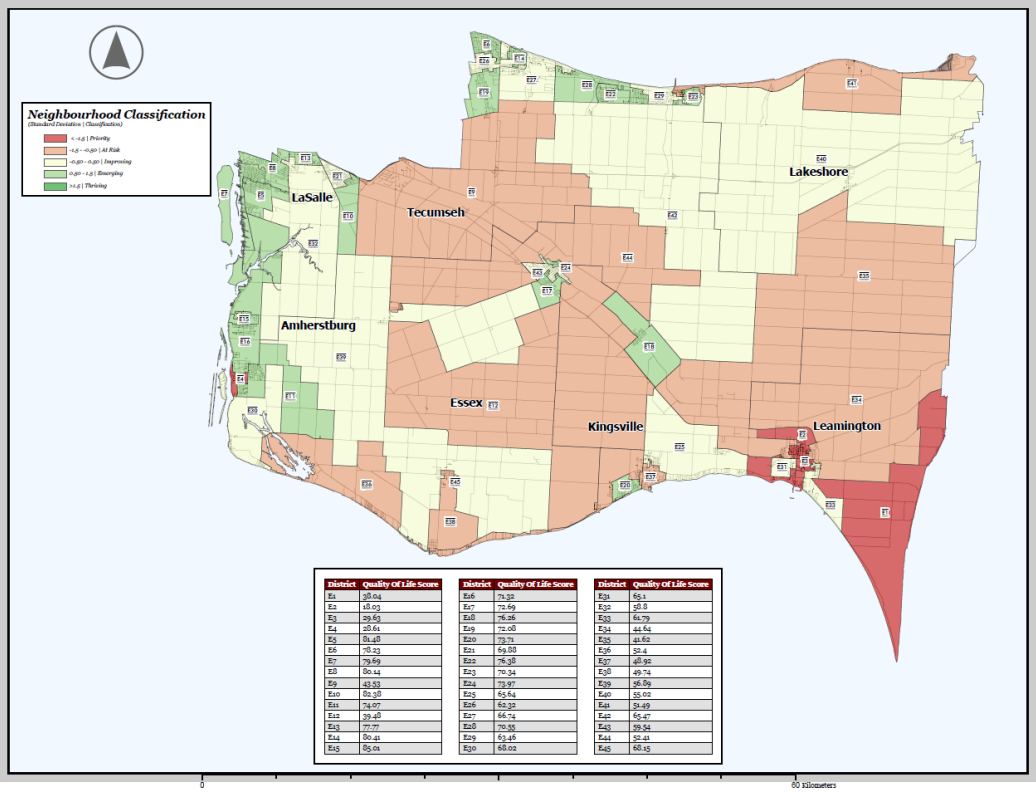


Figure 10 – Windsor Quality of Life Index Map by Standard Deviation (Essex County Only)



District	Quality Of Life Score	District	Quality Of Life Score	District	Quality Of Life Score
E1	38.04	E16	71.32	E31	65.1
E2	18.03	E17	72.69	E32	58.8
E3	29.63	E18	76.26	E33	61.79
E4	28.61	E19	72.08	E34	44.64
E5	81.48	E20	73.71	E35	41.62
E6	76.23	E21	69.88	E36	52.4
E7	79.69	E22	76.38	E37	46.92
E8	80.14	E23	70.34	E38	49.74
E9	43.53	E24	73.97	E39	56.89
E10	82.38	E25	65.64	E40	55.02
E11	74.07	E26	62.32	E41	51.49
E12	39.48	E27	66.74	E42	65.47
E13	77.77	E28	70.55	E43	59.54
E14	80.41	E29	63.46	E44	52.41
E15	85.01	E30	68.02	E45	68.15

2.3.6 – Verifying the Index

Index results were verified utilizing socioeconomic indicators not applied in calculating quality of life scores. Index results are expected to have comparable outcomes with the socioeconomic indicators identified. Figure 11 summarizes the Pearson correlation coefficient scores between the Windsor-Essex Quality of Life Index and identified socioeconomic indicators.

Figure 11 – Pearson Correlation Coefficient Results

Indicator	Coefficient
GINI Index	0.1684
Homeownership Rate	0.7960
Median After-Tax Household Income	0.6120
(Labour) Participation Rate	0.4548
Dwelling Value	0.5621

The results indicate the Windsor-Essex Quality of Life Index is strongly correlated to housing indicators (homeownership rate and dwelling value) as well as employment-related indicators (participation rate and median after-tax household income).

SECTION 3: NOTES ON THE QUALITY OF LIFE INDEX

3.1 – Terms of Use and Interpretation

The Windsor-Essex Quality of Life Index was developed from the need for an evidence-based approach to identifying areas of vulnerability across the Windsor-Essex region. The index is a population-based analysis versus a focus on equity-seeking groups, with the aim to better understand residents' quality of life. Of central focus is the importance of place and how the location of where individuals live, work and play have an impact on their quality of life.

While quality of life scores provide a lens on the level of need within a geographic area, the scores are intended to provide only an initial understanding. Quality of life scores are calculated averages. However, there may be existing differences and characteristics unique to a resident or community that impacts their quality of life and may not be captured through the quality of life score. Validation from additional data sources, local knowledge and consultations is required to further understand the unique challenges, needs and opportunities experienced by residents within identified priority areas.

The Windsor-Essex Quality of Life Index is not used to measure outcomes or track progress on P2P interventions. The Neighbourhoods Program focuses on resident empowerment as vehicles for building resilient neighbourhoods. Actions may include resident-facilitated activities, such as tree plantings, which facilitate greater participation and encourage improvements to air quality. While air quality is an indicator within the Quality of Life Framework, P2P interventions could not be used as a stand-alone to measure improvements to air quality as there are macro-level factors that affect air quality, such as greenhouse gas emissions and renewable energy sources. Similarly, marginalization is an indicator within the Health domain and is included in the Windsor-Essex Quality of Life Index. Many complex and unique dynamics impact marginalization at the individual and community levels. Thus, the Windsor-Essex Quality of Life Index is used for a broader understanding on the conditions of geographic areas and identifying areas with the greatest need.

3.2 – Limitations

Common gaps and challenges with data-driven models (i.e., health equity index, Quality of Life Framework) are lack of high quality data, incompleteness of data and timeliness of data. The Windsor-Essex Quality of Life Index is not exempt from these challenges. Throughout its development, common challenges with the two indices revolved on completeness of data, lack of easily accessible and available data, and timeliness of data. These challenges resulted in several limitations to the Windsor-Essex Quality of Life Index:

Quantity of Indicator Sets – Finding an appropriate balance in the quantity of indicators is challenging as too many indicators could saturate scores to truly understand neighbourhood performance, while too few indicators could mean the index does not capture issues important to quality of life. In its evaluation of quality of life and well-being frameworks developed across the globe, Government of Canada highlighted other countries adopting indicator sets as narrow as 10 indicators. This contrasts with the Government of Canada's set of 84 indicators. In evaluating neighbourhood equity indices developed by City of Ottawa, City of Toronto, and City of Calgary, the indicator sets have ranged between 15 and 20.

The Windsor-Essex Quality of Life Index includes 18 indicators for Windsor and 13 indicators for Essex County. The limitations to include identified indicators for Essex County revolved on challenges with data availability and accessibility. Where data is available and accessible in specific municipalities, it may not have been available across all Essex County municipalities.

Additionally, the Windsor-Essex Quality of Life Index does not contain some of the indicators suggested through consultations. Recreation and culture indicators, such as the number of culture events and membership with recreational affiliations, organizations and groups, are important measures for understanding social isolation and participation in society. However, challenges to accessing readily available data resulted in excluding these indicators from the index.

Leveraging the Government of Canada's Quality of Life Framework offers various advantages including the selection of indicators and identification of domains undergoing a rigorous process of research, data quality testing and validation; a holistic approach to understanding quality of life; a consistent set of criteria for identifying and selecting indicators; and a commitment to continuously improve the framework led by Statistics Canada.

Completeness of Indicators – Some indicators used in the Windsor-Essex Quality of Life Index may not completely represent or describe an indicator within the Quality of Life Framework. For example, time use is an indicator under the Society domain of the framework and is defined as the "distribution of the hours in a person's day spent doing various activities".[9] The Windsor-Essex Quality of Life Index captures only one dimension of time use, which is the average commuting time for residents to travel to and from work. The index does not capture other uses of time such as leisure and work.

The Government of Canada's Framework is used as a roadmap for developing the Windsor-Essex Quality of Life Index, particularly for defining the indicator sets. While data challenges limit the inclusion of

[9] Quality of life indicator: Time use (statcan.gc.ca)

indicators, important opportunities exist to include indicators in future iterations of the index. Statistics Canada, for example, is updating the Quality of Life Framework to enhance its public value and make the framework more accessible for other data users, including those at the community level.

Data Relevancy – Various indicators included in the Windsor-Essex Quality of Life Index derive from Statistics Canada's 2021 Census of Population data. While the data was published in 2021, data was collected in 2020, during the height of the global COVID-19 pandemic. A risk of utilizing 2021 Census of Population data is accurately portraying of the Windsor-Essex community today, amidst the aftermath of the pandemic. Since 2021, the socioeconomic landscape has experienced considerable changes such as population growth, inflation and housing and food security crises.

While Statistics Canada census data, household surveys and other relevant surveys are produced at infrequent intervals, Statistics Canada is an important and relevant source for performing population-based analyses. Statistics Canada data also offers several advantages including ease of access; availability and reliability of data; selection of indicators and identification of domains through a rigorous process of research, data quality testing and validation; and data availability at the dissemination area level.

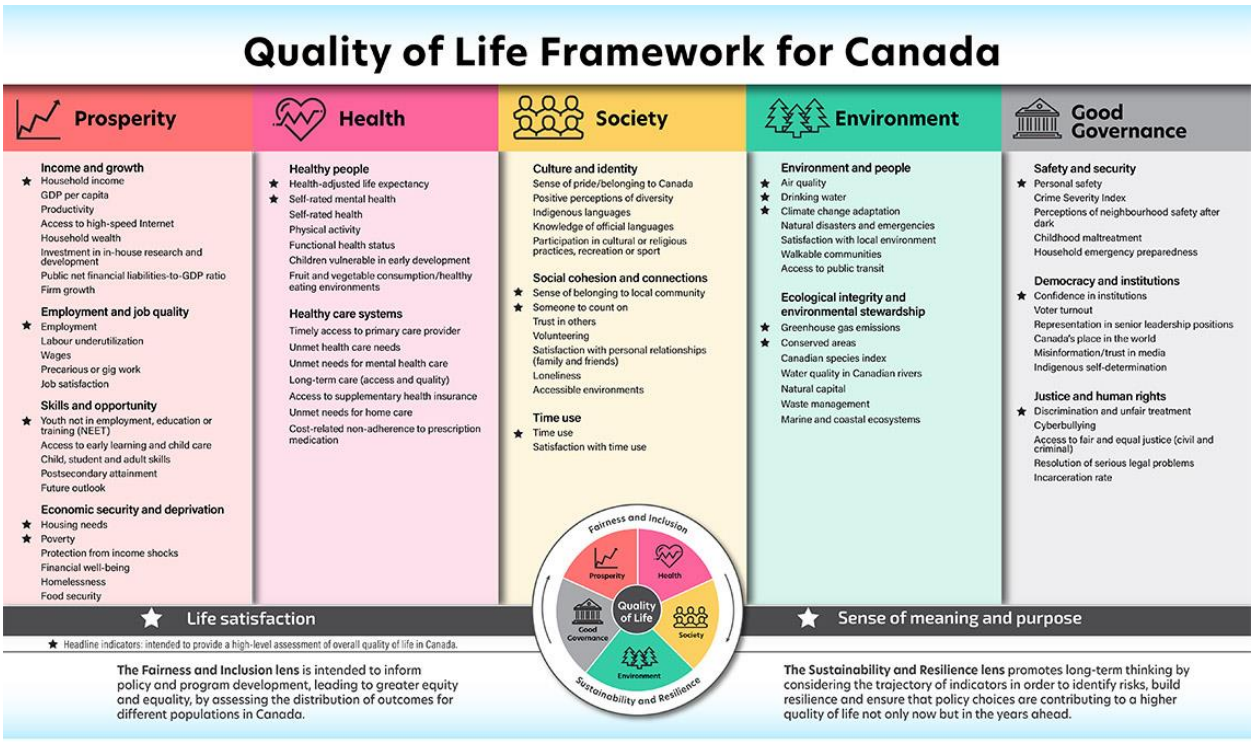
Developing the Windsor-Essex Quality of Life Index is a complex undertaking. The most rigorous part of the development process is identifying and selecting indicators and often requires the consideration of trade-offs. For example, where an indicator may meet one dimension in data quality testing (i.e., representativeness), it may not meet another dimension (i.e., availability at the dissemination area level). The purpose of leveraging the works of WHO's Urban HEART and Government of Canada's Quality of Life Framework is to apply a well-tested and balanced approach to identifying, evaluating and selecting indicators. In addition to these two sources, local input and perspectives are an important part of the index development process. Local input and perspectives further advance that the index is an accurate representation of the Windsor-Essex community.

3.3 – Conclusion

The Windsor-Essex Quality of Life Index serves as an important tool for identifying areas with the greatest need within Windsor-Essex. For Pathway to Potential, the tool assists with identifying priority neighbourhoods where the Neighbourhoods Program would focus on. The tool serves as evidence for defining the Neighbourhoods Program scope of work within the identified areas.

APPENDICES

Appendix A – Government of Canada Quality of Life Framework for Canada



Appendix B – Detailed Indicator Set

PROSPERITY

Being able to afford basic goods and services, such as food, housing and utilities is essential for quality of life.

1	Population on Social Assistance	Windsor	X	Essex County	X
	Definition:	Percent of households who are recipients of Ontario Works.			
	Geographic Unit:	Postal code			
	Data Source:	City of Windsor – Employment & Social Services			
	Year:	2023			
	Comments:				

2	Access to High-Speed Internet	Windsor	X	Essex County	X
	Definition:	Percent of households that have access to high-speed internet services (broadband).			
	Geographic Unit:	Dissemination area			
	Data Source:	Connected North			
	Year:	2021			
	Comments:	Data compiled from the latest information collected from Government of Canada's National Broadband Data Information portal.			

3	Housing Affordability	Windsor	X	Essex County	X
	Definition:	Percent of owner and renter households spending 30% or more of income on shelter costs.			
	Geographic Unit:	Dissemination Area			
	Data Source:	Statistics Canada, 2021 Census of Population			
	Year:	2021			
	Comments:	Shelter costs refer to the average monthly total of all shelter costs expenses paid by households. Shelter costs for owner households and renter households include mortgage payments, property taxes and condominium fees, costs of electricity, heat, water and other municipal services.10			

4	Employment Income	Windsor	X	Essex County	X
	Definition:	All income received as wages, salaries and commissions from paid employment and net self-employment income from farm or non-farm unincorporated business and/or professional practice during the reference period.			
	Geographic Unit:	Dissemination area			
	Data Source:	Statistics Canada, 2021 Census of Population			
	Year:	2021			
	Comments:	For the 2021 Census, the 'wages and salaries' component of employment income included remuneration to employees in 2020 funded through government COVID-19 subsidies programs, such as the Canada Emergency Wage Subsidy (CEWS), while the 'net self-employment income' component of employment income included subsidies from various government financial aid programs to support businesses in 2020 in response to the COVID-19 pandemic, such as the Temporary Wage Subsidy for Employers (TWSE), the Canada Emergency Rent			

[10] Households that spent 30% or more of income on shelter costs, Tillsonburg (Town), 2016 to 2021 [1][2] (statcan.gc.ca)

	Subsidy (CERS), and the Canada Emergency Wage Subsidy (CEWS) that helped cover part of payroll.11
5 Core Housing Need	**Windsor X Essex County X**
Definition:	Refers to whether a private household's housing falls at least one of the indicator thresholds for housing adequacy, affordability or suitability, and would have to spend 30% or more of its total before-tax income to pay the median rent of alternative local housing that is acceptable (attains all three housing indicator thresholds).12
Geographic Unit:	Dissemination area
Data Source:	Statistics Canada, 2021 Census of Population
Year:	2021
Comments:	Households in core housing need live in an unsuitable, inadequate or unaffordable dwelling and cannot afford alternative housing in their community.

HEALTH

Being able to afford basic goods and services, such as food, housing and utilities is essential for quality of life.

6 Marginalization	**Windsor X Essex County X**
Definition:	The degree of marginalization based on 19 socioeconomic variables across four dimensions: residential instability, material deprivation, dependency and ethnic concentration.
Geographic Unit:	Dissemination area
Data Source:	Public Health Ontario
Year:	2021
Comments:	Variables include: Households and dwelling: proportion of the population living alone, proportion of the population who are not youth (5-15), average number of persons per dwelling, proportion of dwelling that are apartment buildings, proportion of the population who are single/divorced/widowed, proportion of dwellings that are not owned, proportion of the population who moved during the past 5 years. Material resources: proportion of the population aged 25 to 64 without a high-school diploma, proportion of families who are lone parent families, proportion of total income from government transfer payments for population aged 15+, proportion of the population aged 15+ who are unemployed, proportion of the population considered low-income, proportion of households living in dwellings that are in need of major repair. Age and labour force: proportion of the population who are aged 65 and older, dependency ratio (total population 0-14 and 65+ / total population 15 to 64), proportion of the population not participating in labour force (aged 15+). Racialized and newcomer populations: proportion of the population who are recent immigrants (arrived in the past 5 years), proportion of the population who self-identify as a visible minority.

[11] Dictionary, Census of Population, 2021 – Employment income (statcan.gc.ca)

[12] Core housing need in Canada (statcan.gc.ca)

7	Access to Healthy Eating Environments	Windsor	X	Essex County	X
	Definition:	Density of food retail outlets within a 10-minute walk (1 km distance from a dissemination block).			
	Geographic Unit:	Dissemination area			
	Data Source:	Canadian Institute of Health Research, Canadian Food Environment Dataset			
	Year:	2018			
	Comments:	Food retail outlets include grocery stores, chain grocery stores and fruit and vegetable markets.			
8	**Access to Emergency Services**	**Windsor**	**X**	**Essex County**	
	Definition:	Proximity of sites that deliver emergency services, including ambulances, hospitals, fire and police.			
	Geographic Unit:	X/Y Coordinates			
	Data Source:	City of Windsor and County of Essex Open Data			
	Year:	2024			
	Comments:				
9	**Commuters Using Active Transport**	**Windsor**	**X**	**Essex County**	**X**
	Definition:	Percent of commuters using their own power to get from one place to another. Active transport includes walking and biking.			
	Geographic Unit:	Dissemination area			
	Data Source:	Statistics Canada, 2021 Census of Population			
	Year:	2021			
	Comments:				

SOCIETY

Time and opportunity to develop relationships with families, friends, neighbourhoods and colleagues is essential for an individual's personal development, as well as for community vitality.

10	Indoor Recreational Amenities	Windsor	X	Essex County	
	Definition:	Proximity to arenas, community centres and sports complexes.			
	Geographic Unit:	X/Y coordinates			
	Data Source:	City of Windsor and County of Essex Open Data			
	Year:	2024			
	Comments:				
11	**Knowledge of Official Languages**	**Windsor**	**X**	**Essex County**	**X**
	Definition:	Percent of the population who can have a conversation in neither English nor French.			
	Geographic Unit:	Dissemination area			
	Data Source:	Statistics Canada, 2021 Census of Population			
	Year:	2021			
	Comments:				
12	**Average Commuting Time**	**Windsor**	**X**	**Essex County**	
	Definition:	Length in time, in minutes, usually required by a person to travel to their place of work in their main job (one way).			
	Geographic Unit:	Dissemination area			
	Data Source:	Statistics Canada, 2021 Census of Population			
	Year:	2021			

ENVIRONMENT

The built and natural environment (such as parks and walkable communities) are aspects of daily life that shape the human experience and impact quality of life in significant ways.

13	Access to Active Transportation	Windsor	X	Essex County	X
	Definition:	Kilometres of bicycle paths and lanes.			
	Geographic Unit:	Road Segment			
	Data Source:	City of Windsor			
	Year:	2024			
	Comments:				

14	Access to Public Transit	Windsor	X	Essex County	
	Definition:	Proximity to public transit stops.			
	Geographic Unit:	X/Y Coordinates			
	Data Source:	City of Windsor			
	Year:	2024			
	Comments:				

15	Green Space	Windsor	X	Essex County	X
	Definition:	Hectares of green area identified by land classifications and by vegetation cover. Includes parks, forest, woodland, woodlots, thicket, savannah, meadow land cover, grassland and bareland.			
	Geographic Unit:	Park Boundaries			
	Data Source:	City of Windsor			
	Year:	2024			
	Comments:				

16	Proximity to Essential Services and Amenities	Windsor	X	Essex County	X
	Definition:	Closeness of a dissemination block to any dissemination block with essential services and amenities (i.e., secondary/primary education, neighbourhood parks, libraries, healthcare, pharmacies, employment) within walking and/or driving distance.			
	Geographic Unit:	Dissemination area			
	Data Source:	Statistics Canada, 2021 Census of Population			
	Year:	2021			
	Comments:				

GOOD GOVERNANCE

Having trust in public institutions is a critical foundation for residents to feel safe with accessing public services and making their voices heard.

17	Incidence of Property-Related Crime	Windsor	X	Essex County	X
	Definition:	Incidence rate of property-related crime by location and occurrence (including theft, shoplift, harassment, robbery, mischief, possession stolen property, break and enter) and involvement type (including accused, arrested, charged, suspect, RPG, wanted, person of interest, subject of complaint, warned).			
	Geographic Unit:	X/Y Coordinates			

	Data Source:	Windsor Police Services, Ontario Provincial Police			
	Year:	2023			
	Comments:				
18	**211 Information Requests**		**Windsor**	**X**	**Essex County**	**X**
	Definition:	Resident call for information and access to services.			
	Geographic Unit:	Postal Code			
	Data Source:	211 Ontario			
	Year:	2020-2024			
	Comments:				

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