April 18, 2023

Managing Future Growth in Mount Uniacke

Final Report Presentation

Michael Bohdanowicz, Jacob Fenchak, John Gamey, Shaoqiu Gong, Ning Liang & Emily Paterson

Innovative Growth Solutions.



- 1. Project Overview
- 2. Demographic Profile
- 3. Spatial Analysis
- 4. Growth Analysis
- 5. Local Consultation/Policy & Document Review
- 6. Jurisdictional Scan
- 7. Discussion & Recommendations



Our Team







Ning Liang

Infrastructure Planner

Emily Paterson

Engagement Planner

Our Client

Contact: Rachel Gilbert, Manager of Planning



EAST HANTS We live it!



Project Overview

1. Provincial/regional context 2. Study area 3. Goal & objectives 4. Research design



Provincial/Regional Context

5% growth rate provincially

Nova Scotia is growing, especially in the HRM. This has implications for neighboring municipalities like East Hants.







Study Area

- Growth and development pressure is making impacts across the municipality
- Four growth management areas in East Hants
- Mount Uniacke GMA unique in being unserviced



Map Data: East Hants. (2016a). Dataset: Growth Management Areas; Nova Scotia. (2023a). Dataset: Municipality and Village Boundaries; Nova Scotia. (2023c). Dataset: Nova Scotia Road Network.

Project Goal & Objectives



Provide the Municipality of East Hants with a series of recommendations for how future growth in Mount Uniacke can be managed.

Objective 1

Identify drivers and barriers to growth in Mount Uniacke

Objective 2

Identify land use arrangements/policies for growth in unserviced areas



Objective 3

Assess the suitability of new and existing policies to manage future growth



Research Design

QUANTITATIVE

QUALITATIVE

PHASE 1

Understanding the local growth context

PHASE 2

Tools for creating a desirable future

Demographic Analysis

Spatial Analysis

Growth Analysis

Semi-structured Interviews

Policy and Document Review

Jurisdictional Scan

PHASE 3

Developing Recommendations

Polices and regulations for growth management

Enabling new land use arrangements

1. Growth rates 2. Population & household characteristics **3. Housing typologies**

*Developed using 2016 & 2021 Census Aggregate Dissemination Area data

Mount Uniacke is growing faster than the region as a whole.

Growth Rates

+5.05%

Mount Uniacke growth rate, 2016 - 2021

+1.96%

Municipality of East Hants growth rate, 2016 - 2021



Households tend to be small, and have been getting smaller.

Percentage of households in Mount Uniacke with 2 or less persons



Population Characteristics





Population by birth year cohort



2016 2021

Population Characteristics

- Significant loss in population of residents 60+
- Significant growth in populations 25-39



Single detached homes dominate local housing stock.





Housing Typologies



1. Transportation network analysis 2. Land use in the Mount Uniacke GMA





Map Data: 2021 Canadian Census Boundary files, East Hants' Growth Management Areas dataset, Nova Scotia's Municipal and Village Boundaries dataset, Nova Scotia's Road Networks dataset

Transportation Networks



• Population densities are highest where highway networks cross municipal boundary with HRM



Transportation Networks



Map Data: East Hants' Growth Management Areas dataset, Nova Scotia's Municipal and Village Boundaries dataset, Nova Scotia's Traffic Volumes - Provincial Highway System dataset

	zone	Acreage	Percentage	
Rural	RU	2139.8	35.92%	
Residential	R1	1148.1	19.27%	
	R2	983.2	16.51%	
	LR	231.5	3.89%	
	CR	0.0	0.00%	
	MH	39.5	0.66%	
Mixed Use & Commercial	BP	277.9	4.67%	
	RC	207.5	3.48%	
	VC	88.2	1.48%	
	GC	0.9	0.02%	
	HC	3.4	0.06%	
Other	OS	317.3	5.33%	
	IC	27.5	0.46%	
	IU	5.8	0.10%	
	WG	116.7	1.96%	



Map Data: East Hants' Growth Management Areas dataset, Nova Scotia's Road Network dataset, East Hants' Land Use Zoning dataset

Land use in the Mount Uniacke GMA

- Zoned primarily for residential land uses
- Limits for mixed-use development



Recent development trends
Population forecasting
Land use capacity

ysis trends



Average annual decrease in lots created by subdivision, 2016 - 2020

+302.7%

Average annual increase in lots created by subdivision, 2020 - 2023 (so far)

Recent Development Trends in the Mount Uniacke GMA







Map Data: East Hants' Growth Management Areas dataset, Nova Scotia's Road Network dataset, East Hants' Land Use Zoning dataset, East Hants' Subdivision Data - Mount Uniacke 2021 - 2023 [Internal Municipal Document] dataset

Subdivision Trends (2021 - present)

• Built form is dominated by single-detached homes on large lots (4.8 acres on average)

• One larger-scale subdivision occurring

outside of the GMA boundary



Zoning	R1	R2	RU
Undeveloped Area	766.95	357.57	1982.81
% of Undeveloped Area	66.80%	36.37%	92.66%



Map Data: East Hants' Growth Management Areas dataset, Nova Scotia's Road Network dataset, East Hants' Land Use Zoning dataset, East Hants' Subdivision Data - Mount Uniacke 2021 - 2023 [Internal Municipal Document] dataset

Development Capacity





Population Forecast

Forecasted Scenarios:



2000							
2000	2021	2026	2031	2036	2041	2046	2051
	2212	2278	2347	2417	2490	2564	2641
6%(Nomal)	2212	2345	2485	2635	2793	2960	3138
	2212	2433	2677	2944	3239	3562	3919

Development Capacity Models:



Population Forecast



Local Consultation & Policy and Document Review



Local Consultation



Preservation of Community Character

Development Trends and Local Housing Needs

Challenges within Current Policy



Policy and Document Review

Intended Growth Patterns

need for new housing types

Limits on Growth in **Unserviced Areas**

Infrastructure: Limits & Opportunities

- Barriers for mixed-use development

• Alternative systems and servicing provisions -



• Need to balance existing community character and

• Large lot size for residential and commercial uses

Comprehensive Development District Designation



1. How cluster septic systems work 2. Enabling cluster septic systems **3. Managing cluster septic systems 4. Applicability in Nova Scotia**



Identify new and innovative land use arrangements for growth in unserviced areas.

> Cluster & Community Septic Systems

How are these systems managed in practice?

How are these systems enabled in policy?





Please note: Septic systems vary. Diagram is not to scale.

How Cluster Systems Work

Cluster Systems are centralized wastewater systems that can service various types of developments

• Operate like traditional private onsite systems, but rely on a **centralized** outlet for treated wastewater

 Allow for smaller minimum lot sizes in unserviced areas, and therefore more compact development patterns

Enabling Cluster Systems

Planning strategies and land use by-laws can be used to enable and regulate cluster septic systems

- Define cluster septic systems
- Regulate construction standards
- Establish management responsibility
- Develop new minimum lot sizes



Two pathways for management

Municipal Management

- By-law granting municipal authority to own, manage, and maintain
- Transfer agreements
- User Fee Models

- Maintenance paid for by the condo corporation or landowner
- Level of maintenance dependent on ownership

Managing Cluster Systems



Private Management



Provincial Regulatory Documents

Only allow individual property owners to connect to a shared cluster system in cases of "condominium" or "municipal" developments



Cluster Systems in Practice in Nova Scotia

Wastewater Management Districts

 Allow municipalities to takeover, own, operate, and maintain private on-site systems & cluster systems

Wastewater Management Districts

- While WMDs provide an opportunity for municipalities to facilitate **cluster systems** they are not intended for that purpose
- Statement of Provincial Interest notes WMDs and cluster systems should be considered "where on-site disposal systems are experiencing problems"
- Challenge: regulations do not intend for WMDs to be used for fostering growth and nontraditional development patterns

Cluster Systems in Practice in Nova Scotia





2022 Subdivision Serviced with Private On-Site Systems

- detached homes)

Cluster Systems in Practice in Mount Uniacke

• Total land area: 56.9 acres

• Re-zoned for residential use

• Resulted in 35 new lots (all for single-

• Average lot size: 1.6 acres





Re-imagining the site using cluster systems

Cluster Systems in Practice in Mount Uniacke

• Total land area: 56.9 acres

• Reduced minimum lot sizes

• 44 single-detached homes, 14 townhouses, 2 8-unit apartment complexes



Discussion & Recommendations

1. Need for new growth policy frameworks 2. Cluster septic systems as a solution **3. Recommendations**

Discussion

Mount Uniacke can be expected to continue growing. Current policy makes achieving needed/desired growth patterns difficult.



Investigate avenues for enabling and encouraging the use of cluster septic systems Need for expanded studies and secondary consultation





Recommendations

Enable and encourage the use of cluster septic systems



Expand the growth management study



Explore Provincial interest for collaboration on a pilot project



Recommendation #1

Enable and encourage the use of cluster septic systems in a secondary planning strategy for Mount Uniacke

- Define cluster septic systems in the secondary planning strategy and relevant land use by-law.
- Develop policy establishing that cluster septic systems are to be approved by the Department of Environment and that private developers are responsible for the construction.
- Develop policy statements in the secondary planning strategy asserting that cluster septic systems are enabled for efficient development and increased housing diversity.
- Set new minimum lot size requirements for lots connected to cluster septic systems and develop policies that direct mid- to large-scale developments serviced by cluster septic systems to lands deemed most suitable.

Recommendation #2

Expand the growth management study

- Commission a study into land and soil conditions in the Mount Uniacke GMA.
- Conduct an internal investigation into municipal capacity to own, manage, and maintain cluster systems.



Recommendation #3

Explore collaborative opportunities with the Province

- Explore possibility of a pilot project where cluster systems are owned and operated municipally through a WMD by-law to achieve non-traditional development patterns.
- Draft a memorandum to the Province that explains the municipality's interest in cluster systems and potential benefits the Province could derive from participation in a pilot project.
- Begin dialogue with Province for updating current infrastructure policy and technical guidelines/requirements to better support growth in unserviced areas.



Limitations

- 1. This report provides a preliminary study, need for secondary analysis
- 2. Lack of Secondary knowledge of engineering and system regulation
- 3. Lack of engagement
 - a. Lack of engagement with public works to consider capacity and willingness for
 - implementation or change
 - b. Timing constraints did not allow for greater engagement with local residents
- 4. Lack of fully accurate demographic data, ADA and GMA don't directly align and may not be fully realized in community.



Thank you! Questions?

Innovative Growth Solutions.