

Planning Advisory Committee Meeting AGENDA

Thursday, May 13, 2021 – 7:00 p.m.

1. CALL TO ORDER

1.1 Mi'kma'ki Territorial Acknowledgement

2. REVIEW OF PROCEDURE FOR PUBLIC TO ADDRESS THE COMMITTEE – CHAIRPERSON (below)

3. APPROVAL OF AGENDA (any other items to be added)

4. APPROVAL OF MINUTES OF THURSDAY, APRIL 29, 2021

5. BUSINESS ARISING FROM MINUTES

6. PLANNING ADVISORY COMMITTEE MATTERS

6.1 MODL2040 What We Heard Report – Part One 1-24

6.2 Population Projection 2040 (Updated) Report 25-36

7. HERITAGE ADVISORY COMMITTEE MATTERS

8. ADDED ITEMS

9. IN CAMERA

10. NEXT MEETING DATE: THURSDAY, MAY 27, 2021

11. ADJOURNMENT

PROCEDURE FOR ADDRESSING THE COMMITTEE

An opportunity will be provided to all citizens to address the Committee on each item under Committee Matters shown on this Agenda or added to the Agenda by the Committee. Individuals who wish to address the Committee are asked to note the following:

- On each Committee Matter on the Committee's Agenda, the Chair will seek public comment upon the completion of staff's presentation.
- Each person shall state their name.
- All statements and questions shall be directed to the Chairperson.
- Presentations shall be limited to 10 minutes. Persons wishing to address the Committee a second time will be given opportunity to do so once all others in attendance have had the opportunity to address the Committee. Persons addressing the Committee for a second time shall limit their presentations to 5 minutes.
- Since at this time we are not having in person public attendance, any citizen wishing to address the Committee may use the chat function on Facebook Live which is monitored by staff.

Anyone wishing to address the Committee on a matter not included on this Agenda can have the matter added to the next meeting's Agenda by contacting Jeff Merrill, Director of Planning and Development Services, at 902-521-0925 or by email at planning@modl.ca

MODL2040



What We Heard Report – Part One
Prepared for Planning Advisory Committee
May 6, 2021

**Planning and
Development Services**



INTRODUCTION

The MODL2040 Community Goals Survey provided the first opportunity for public engagement with the goal of obtaining quality public feedback on community priorities over the next 20 years.

This feedback is essential to assist in the development of the vision, mission, values, and goals that will guide the development of the municipal planning strategy and land use by-law for the Municipality.

The survey is a means for starting the conversation which will help decide the municipal role in helping communities and the region manage the challenges and opportunities which face them today and towards 2040.

As the MODL2040 project has been referred to the Planning Advisory Committee to provide overall review and regular updates to Council, the first conversation on framing the municipal planning strategy begins with this report.

BACKGROUND

Creating a 20-Year Vision

Through the MODL2040 project, we are all tasked to consider the next twenty years and imagine how we need to plan our communities to meet the opportunities and challenges of the future. We will be looking at factors related to how we collectively organize our lives, as individuals and communities, and how we interact with the natural environment.

We want to create a vision of how we will most effectively meet these circumstances and ensure that we are developing the infrastructure and services to match our vision. We also want to consider how we can work better with our neighbouring communities and other levels of government as we have many areas of shared interest and responsibility.

The Community Goals Survey was designed to examine some of the more important topics that we will be addressing over the course of the MODL2040 project.

In developing a vision for MODL, we will examine the priority areas identified in the survey with the Planning Advisory Committee and with Council, and create statements on vision, values, and goals to help guide the remainder of the project. This framework will be brought back to the public later in the year to ensure we have it right.

Survey Design

The survey included questions aimed at learning more about the public's view on the five areas covered by the Provincial Statements of Interest: Drinking Water, Flood Risk Areas, Agricultural Land, Infrastructure, and Housing. Conversations held with local stakeholder organizations over the fall of 2020 provided additional focus for the topics included.



Quantitative Design

Questions were included which provided descriptive data (e.g., community of residence, age group, commute distance) as well as ranked priority data (e.g., top community priorities list, priorities in housing). Quantitative data-related questions gave us a better sense of who was responding and provided categories to further analyze the qualitative text-based questions.

Qualitative Design

Qualitative questions were less structured, allowing respondents to utilize an open-ended format to tell us more about their community priorities. Whereas quantitative data can be assigned numerical values relatively easily, qualitative data is analyzed in manner summarized below:

1. Initial preparation and organization of data
2. Review and exploration of data
3. Creation of initial codes
4. Review and revision of codes; combining responses into themes
5. Presentation of themes in a cohesive manner

In terms of data presentation, we are able report on themes and the strength of themes based on the number of similar responses. Qualitative data relies on interpretation and is more subjective as a result, but it is also powerful in the sense of being able to convey more complex ideas and experiences. This report used representative responses, or exemplars, to help demonstrate emergent themes.

LIMITATIONS OF SURVEY

Survey limitations are provided as a means of acknowledging shortcomings of factors related to the survey's design, distribution, and analysis. The intention is to use known limitations plus public feedback to improve future surveys but also a means to describe and test the strength of the data and the extent to which it represents the greater community of MODL.

Survey Distribution Methods

Due to public health restrictions related to the COVID-19 pandemic, survey distribution was limited to online availability (through the engage.modl.ca site), limited hand delivery by Councillors, and making hard copies available at the front desk of the Municipal Building. We were not able to take the survey out to the public in person as we would normally have done.

This may mean that people who could have participated were not able to and we note that the rural internet distribution project is ongoing and not all residents have access to a computer or internet.



Time Limits

The survey ran for approximately 2.5 months, following a mid-January media promotion. To maintain the overall project timeline, we could not go any later than the March 31st closing dated however a longer survey run may well have allowed for more respondents and potentially a window for face-to-face public engagement post-COVID vaccine rollout. Time and staffing limitations also meant that we were not able to launch a youth survey; we will look to do so over the upcoming summer/fall timeframe to capture this important demographic.

Potential Bias in Analysis

Qualitative analysis utilizes the best judgement of individuals to determine key themes. Subjectivity bias is noted as a potential limitation as a single individual was tasked with creating themes from the data set.

SURVEY RESULTS

Section 1 – General Information

Section Design

The first section of the survey contained questions that yielded descriptive information from the respondents on their general location of residence, age, work location and commute as well as to where they shop. The purpose of collecting this data was to help provide a sense of the reach of the survey as well as allowing us to examine qualitative question responses based on categories of community and age group.

Question 1 – Are you a resident of the Municipality of the District of Lunenburg?

Question Design

This question was designed to act as a broad indicator of the municipality of origin of respondents. Non-MODL participants in the survey were permitted to complete all questions and their responses were included in the overall analysis unless the responses pertained to aspects that are the responsibility of another municipal unit.

We did not define ‘resident’ so it is reasonable to assume that we received responses from a range of permanent and seasonal residents. This was a mandatory question, and the response options were either yes or no.

Question Results

We received 488 responses to Question 1 with 475 indicating that they reside within MODL (97.3%) and 13 residing outside MODL (2.7%).



Question 2 – Which community do you live in?

Question Design

In Question 2, the term ‘community’ was not defined, and respondents were required to type/write in their community. While we expected that most responses would represent the 134 communities within MODL, we recognized the possibility that respondents may identify with ‘greater communities’, see MODL as the community of reference itself, or own property in MODL but live elsewhere. Data from respondents who indicated locations outside of the 134 MODL communities was retained for overall survey analysis. Responses which pertained to responsibilities within other municipalities were not considered in our findings.

Question Results

A total of 485 text responses (99.4% of total respondents) were provided for Question 2 with 3 respondents choosing not to provide an answer. A total of 427 responses specified one of the 134 communities within MODL, with 99 of the MODL communities having at least one respondent. The distribution of respondents is shown on Map 1. Two respondents provided their district, District 10 and District 7.

A total of 54 respondents indicated that they lived in communities other than the 134 established MODL communities. The distribution for non-MODL responses is provided in Table 1.

Table 1: Respondents Identifying non-MODL Communities.

<u>Community</u>	<u>Number of Respondents</u>	<u>% of Total Respondents</u>
Bridgewater	24	4.9%
Lunenburg	14	2.9%
Mahone Bay	10	2.0%
MoD Chester	5	1.0%
Region of Queens	1	0.2%
Annapolis County	1	0.2%
Shelburne County	1	0.2%
TOTAL	56	11.5%

Question 3 – Please select your age group.

Question Design

This question was provided to allow further exploration of potential age differences in later questions and to give an indication that we were effectively able to reach age groups in a way which was representational of the known demographics for the area.

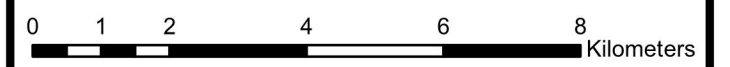
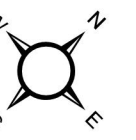
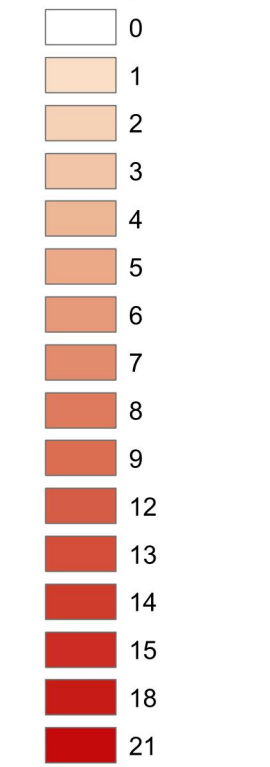


Map 1

Survey Counts By Community

- Provincial Road
- Municipal Road
- Private Road
- Waterbody

Survey Count



MUNICIPALITY OF THE DISTRICT OF LUNENBURG

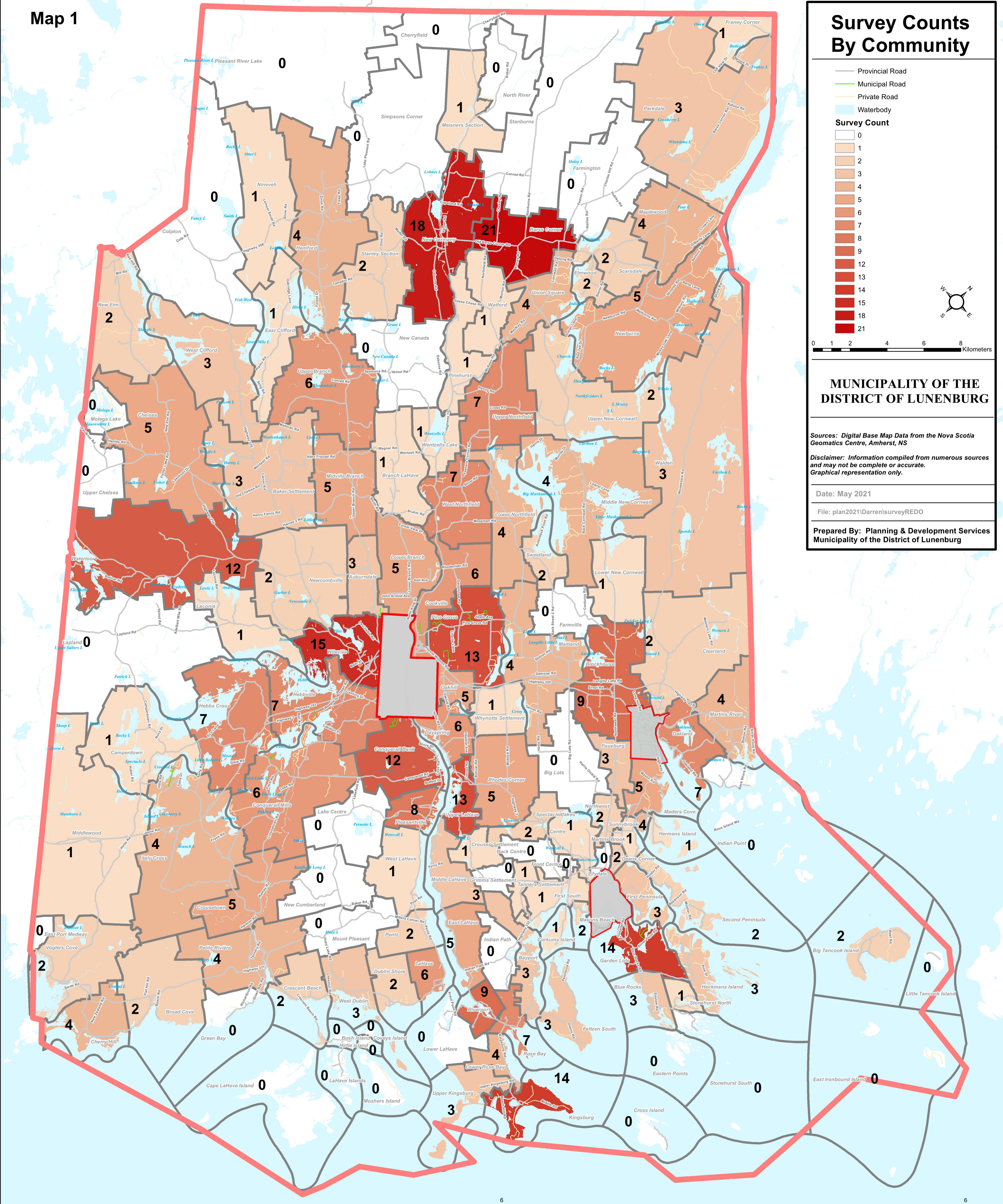
Sources: Digital Base Map Data from the Nova Scotia Geomatics Centre, Amherst, NS

Disclaimer: Information compiled from numerous sources and may not be complete or accurate. Graphical representation only.

Date: May 2021

File: plan2021DarrensurveyREDO

Prepared By: Planning & Development Services
Municipality of the District of Lunenburg



Question Results

A total of 487 age group responses (99.4% of total respondents) were provided. The distribution of age groups is indicated in Figure 1 with comparison data shown in Figure 2.

Figure 1: Survey Distribution of Age Groups

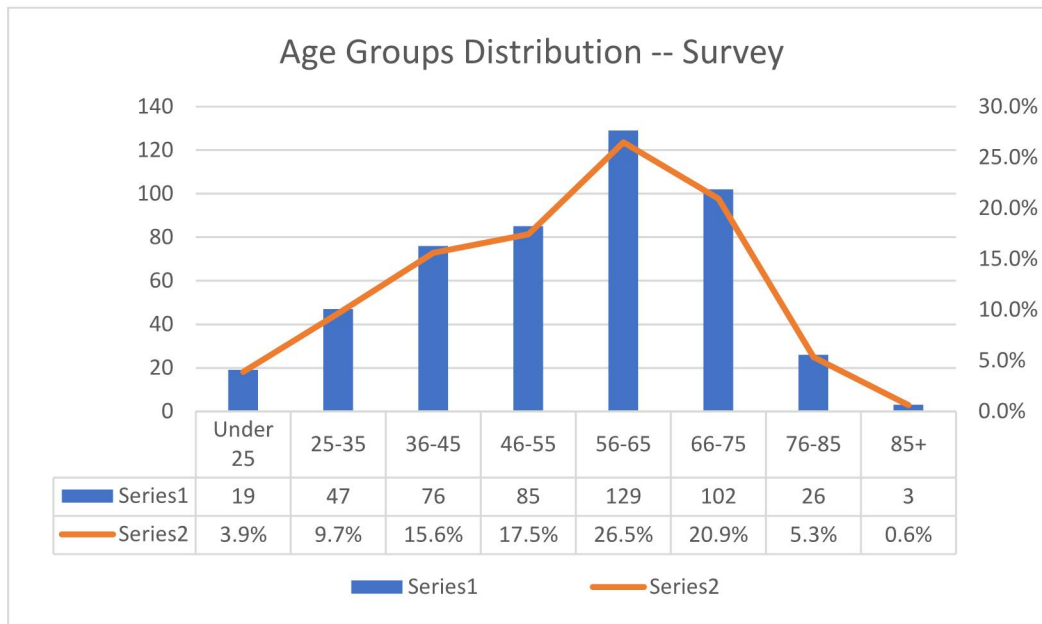
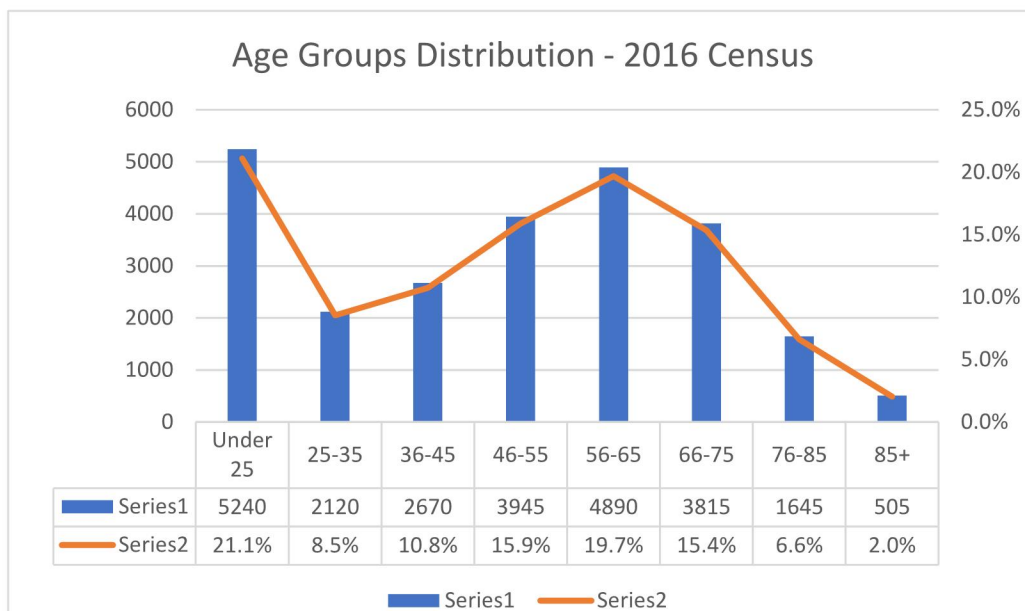


Figure 2: 2016 Census Distribution of Age Groups



Question 4 – Please select your work location?

Question Design

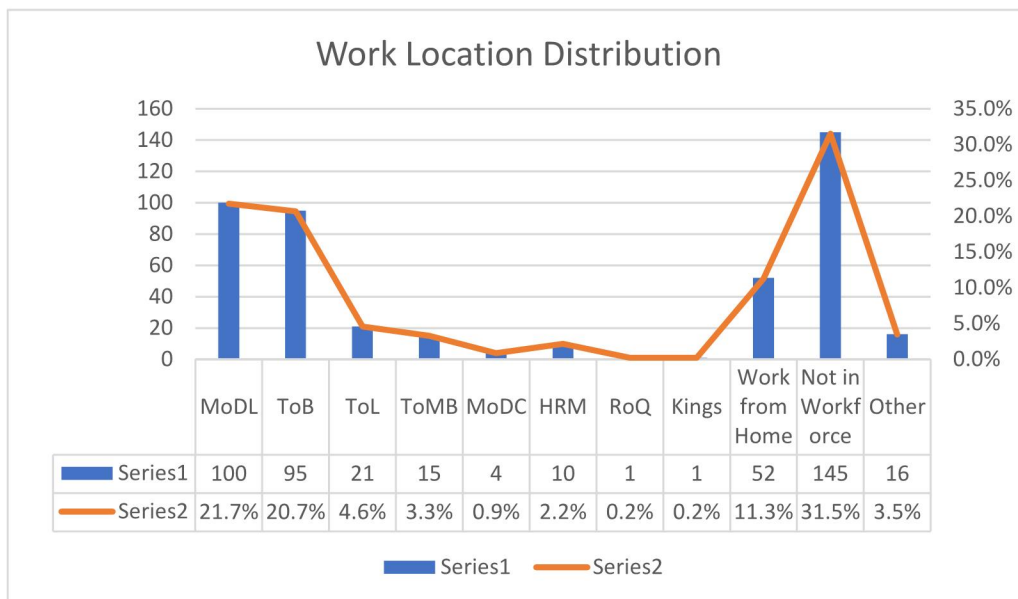
Question 4 was designed to determine the work location for respondents which provides a better sense of respondent employment characteristics.

Respondents were asked to select one of nine municipalities, work from home, not in the workforce or ‘other’.

Question Results

- ‘Other’ responses covered respondents who worked in other parts of the country or over multiple areas within the province.
- 460 responses, 28 skipped
- Location responses are provided in Figure 3.

Figure 3: Work Location Distribution



Question 5 – How many minutes does it take for you to travel to work one way?

Question Design

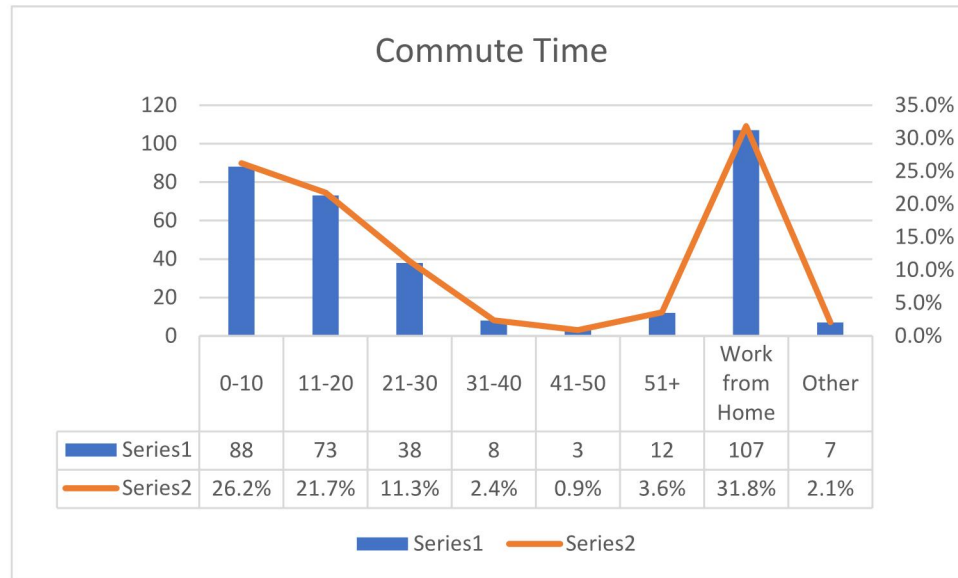
Respondents were asked to select between 6 commute times, work from home, or other.



Question Results

- 425 responses – 89 filtered out ‘others’ that indicated retired, not in work force, or N/A
- 63 skipped
- 336 responses analyzed.
- Commute times are indicated in Figure 4.

Figure 4: Commute Time



Question 6 –Where do you do most of your shopping? (pre-COVID and/or currently)

Question Design

Respondents were asked to provide their shopping locations. Locations were later tagged for ease of presentation.

Question Results

Response results are provided in Figure 5.



Figure 5: Distribution of Shopping Locations



Section 2 – Community Priorities

Section Design

The second section of the survey contained questions that yielded more detailed information on community priorities related to the Provincial Statements of Interest as well as municipal infrastructure and services. This section provided opportunities for respondents to provide open-ended feedback wherever possible.

Question 7 – What are your top priorities for improving your community? Please rank the following list from 1 to 11 with 1 being your most important priority.

Question Design

This question was designed to act provide a relative rating of existing municipal priorities as well as offering an opportunity for respondents to provide priorities not listed.

We did not define ‘community’ so it is reasonable to assume that we received responses based on a variety of possible interpretations of this term.

Question Results

- 477 responses; 11 skipped
- Results are provided in Table 1.



Table 1 - Average Ranking of Community Priorities

OPTIONS	AVERAGE RANK
Environmental Protection	3.58
Climate Change	4.35
Improving Housing Options	5.12
Access to Lake, River, and Ocean Shorelines	5.20
Making Future Development Safe & Predictable	5.27
Protecting Agricultural Land	5.42
More Parks & Recreational Facilities	5.67
Other (see Question 8)	6.57
Access to Commercial Services	6.62
Heritage Preservation	6.82
Access to Municipal Services (water & wastewater services)	7.38

Question 8 – If you answered ‘other’ in question 7 above, please explain your community priority.

Question Design

This question was designed to provide respondents the opportunity to give greater detail on a community priority not included in the list given in Question 7. As this question allowed for long-form text responses, qualitative methods were used to determine key themes that represented the breadth and strength of responses. Exemplar quotations were then chosen to represent themes.

Question Results

- 194 Respondents provided ‘other’ response
- 217 Responses
- 6 Major Themes
- 22 Sub-themes

Theme 1 – Infrastructure and Services (131 responses)

Sub-theme 1 – Internet Services (26)

The provision of high-speed internet services was seen as a priority for those working from home as well as those with school-aged children. Disparities in existing coverage over the municipality was discussed.

“I have had to turn down better employment opportunities due to my internet connection.”

“There is no internet for the ones who work from home and for school work.”



“Rural internet because without that some of our neighbours don’t have access to the same services as others.”

Sub-theme 2 – Cell Phone Services (9)

Improvements to cell phone reception was described as a priority for similar reasons as internet coverage, and often commented on together by the same respondent.

“Internet availability and cell phone reception improvements to enable better work from home options.”

“High speed Internet for all and for gosh sakes better cell phone coverage, WE have none.”

Sub-theme 3 – Road Infrastructure (29)

The road infrastructure sub-theme covers priorities in road maintenance and road improvements to allow greater safety and afford space to cyclists and pedestrians.

“Maintenance of roads and clearing sides of road of trees/ bushes therefore more able to see wildlife I.e deer.”

“The roads are very busy and not wide enough to accommodate tragic, pedestrians, and recreational activities (cycling).”

Sub-theme 4 – Infrastructure (Other) (18)

Other infrastructure priorities include accessibility, equitable distribution of infrastructure, and the extension of existing infrastructure services & programs.

“Accessibility - this goes along with many of the other priorities but many of them are irrelevant if the members of our community can't access them.”

“I believe every resident is entitled to equal access to infrastructure (roads and utilities).”

“Fair and equitable subsidies for all Modl residents to address straight pipes, solar energy adoption and clean water. To date, only provided to a limited few, and yet all our tax dollars are green.”

Sub-theme 5 – Recreation Infrastructure (13)

Priorities mainly focused on trail development and access to waterfronts & public lands.

“Active transportation paths or trails that are public or owned by the municipality.”

“With the privatization of our lakes and rivers by development, causing the lack of public access, I feel public access to our waterways is a # 1 priority.”





Sub-theme 6 – Health Services (15)

Respondents who provided a health services priority were mostly focused on improving access to services and the recruitment of health care professionals.

“Healthcare should be a priority for the province, not just our community.”

“We MUST come up with creative ways to entice doctors and nurse practitioners to the province.”

Sub-theme 7 – Public Transit (11)

The public transit priority envisaged a transit system that would serve rural areas and help residents age in place.

“Inter and intra-town transportation. A system where people can get to/from town easily, without having to always drive, that is convenient and safe in all seasons.”

Sub-theme 8 – Services (Other) (13)

Priority areas of improved seniors and youth services was discussed.

“I would like to see more programs available to help seniors in need, ie. Affordable housing, wellness checks for those isolated, mental health services.”

“Youth initiatives, development, places for youth to congregate, learn, grow.....there is nothing out there for our youth...”

Theme 2 – Social (15 responses)

Sub-theme 1 – Inequality (5)

Inequality sub-themes included priorities based on socio-economic, community, and racial disparities.

“Making all people equal. No difference in treatment. One community shared together.”

Sub-theme 2 – Community (5)

Encouraging community character and resilience were developed as priorities.

“To keep our community sustainable, viable and a great safe place to raise a family. To keep community support and community family.”





Sub-theme 3 – Arts and Culture (5)

The Arts & Culture priority focused on the role it plays in community development.

“Cultural planning and development ie policies and practices that support the development of culture in the community ie cultural and creative industries, the protection and preservation of tangible and intangible culture in the community.”

Theme 3 – Governance (14 responses)

Sub-theme 1 – Red Tape Reduction (2)

A priority of improving or reducing processes related to development was advanced.

“Less red tape for Economic Development. A better, more streamlined process is needed for the building permit process, and many other areas where permits are required.”

Sub-theme 2 – Smaller Government (3)

Smaller government was a priority theme based on the idea of scaling back to core service provision.

“Reducing gov't at every level, get out of the ice cream and recreation business, do your core function and reduce taxes all around then perhaps people can afford to take control of their own destiny.”

Sub-theme 3 – Fiscal (5)

The fiscal theme included priorities based on reducing tax as well as proposing new tax policies to help achieve other municipal goals.

“Fiscal stability – living within our means to keep the tax rate low”

“Grants and tax relief for reasonably sized energy efficient homes. Tax increases (luxury tax) for excessively large homes; homes that are occupied less than 2 months annually; ...used as temporary rentals (13airbnb); ...constructed in environmentally sensitive and risk prone areas; ...constructed without taking solar orientation and prevailing wind and weather into account.”

Sub-theme 4 – Other (4)

The ‘other’ governance sub-theme captured responses for priority to be given to the enforcement of existing by-laws regarding unsightly properties and abandoned vehicles.

“There needs to be some collective political effort in cleaning up derelict vehicles. MODL has far too many home owners with derelict vehicles on their property.”





Theme 4 – Economic (23 responses)

Sub-theme 1 – Business Support (9)

Priorities areas in the business support sub-theme included emphasis on business attraction, and support for small businesses and non-profits.

“Putting something in place (incentives, information, small business assistance to enable price matching, etc.), to encourage local buying practices and discouraging on-line (Amazon, big box) shopping.”

Sub-theme 2 – Local Resilience (4)

Strengthening the resilience of the local economy through better utilization of agricultural lands was noted as a priority sub-theme.

“Would like to see development of agricultural lands not currently in active use be developed for local food production... to ensure a local, reliable and fresh source of foods to ensure quality food availability without the high environmental impacts of shipping as well as the detriment to the produced food in shipping and storing it.”

Sub-theme 4 – Other (10)

The ‘other’ economic sub-theme recognized challenges related to demographics in ensuring employment opportunities for youth, and cost of living challenges making it necessary to prioritize affordable service provision.

“Affordable Electricity, reliable & affordable internet.”

“Job creation to keep our younger people opportunities to stay here.”

Theme 5 – Environment (18 responses)

Sub-theme 1 – Conservation/Environmental Protection (12)

Responses indicated priorities related to the protection of undeveloped land, watershed protection, and prioritizing sustainable forestry practices.

“...the creation of both "wilderness zoning" (that would be free for residents to switch their un-lived on land to and could come with incentives for folks to do that, i.e. slightly less taxes than "mixed purpose/forestry" land. Switching "wilderness land" back would cost money). ALSO, all future developments would have to pass some sort of "habitat friendly" approval.”

“Education as to why it is important to preserve our SCANTY AG areas here in L'burg County, watershed protection, logging & forestry sustainable practice”

Sub-theme 2 – Sustainability (6)

Sustainability and renewable energy were given as priorities under this sub-theme.

“Sustainability is highest priority. No new building until all empty buildings are occupied -- or retrofit to be occupied.”

“Generate own renewable energy, increase energy efficiency of existing buildings.”





Theme 6 – Housing & Development (12 responses)

Sub-theme 1 – Improve Housing Options (8)

'Improving Housing Options' was a priority listed in Question 7 however, some respondents chose to provide more detail and noted priority areas of seniors and affordable housing.

"Have more (a lot more) rental options that are fully accessible and on one level (e.g. like garden apartments/townhouses) for those who are on fixed incomes (e.g. retirees)"

Sub-theme 2 – Development Controls (4)

Responses indicated a priority for development controls to protect from overdevelopment and to help preserve community character.

"Prevent overdevelopment by setting minimum lot sizes and stopping lot subdivision. Protect the beach protection zone against further encroachment."

"Preserving residential areas to remain residential..."

Question 9 – Does your community offer the housing and services to allow you to continue to live in the Municipality at every stage of your life?

Question Design

This question was designed to provide respondents the opportunity to consider whether their community supported the concept of providing housing for all stages of life. Responses were either 'Yes', 'No', 'Uncertain', or 'Other (please specify)'. The other selection allowed for a short-answer response to be provided.

Question Results

- 483 responses; 5 skipped
- 121 responded 'yes' (25.1%)
- 165 responded 'no' (34.2%)
- 172 responded 'uncertain' (35.6%)
- 25 responded 'other' (5.2%)

'Other' Themes (23 responses analyzed)

- 4 primary themes; Governance, Affordability, Availability, Services

Theme 1 – Governance (2 responses)

Responses focused on the municipal role regarding housing, asserting that it was not the responsibility of MODL to examine this question.

"Are you actually insinuating the Municipality somehow be responsible to provide housing?"





Theme 2 – Affordability (5 responses)

The affordability theme developed from responses regarding the difficulty faced by low income and young families in finding affordable housing options.

“I feel right now fine for me but may be a problem in the future. I also feel low income people are being forgotten.”

“limited for low income or new first time”

Theme 3 – Availability (8 responses)

The availability of housing, particularly seniors housing emerged as a theme, with some respondents discussing how they will be forced to move out of their community.

“Fine for now, but will move into Bridgewater if I become frail or disabled.”

“there is a shortage of senior living accommodations and services in the area”

Theme 4 – Services (8 responses)

The services theme developed from responses indicating both the erosion of local services and the community response to being underserved.

“Presently it is mostly covered, but I worry about the future as there is a slow erosion of services in this rural area.”

“It is there but not in the way of infrastructure but in the way of people looking out for people. Checking in, helping out, doing errands”

Question 10 – What type of housing do you live in?

Question Design

This question was designed to understand the form of housing occupied by respondents. The primary reason for including this question was to determine if the respondents were representative of the known distribution in housing for MODL.

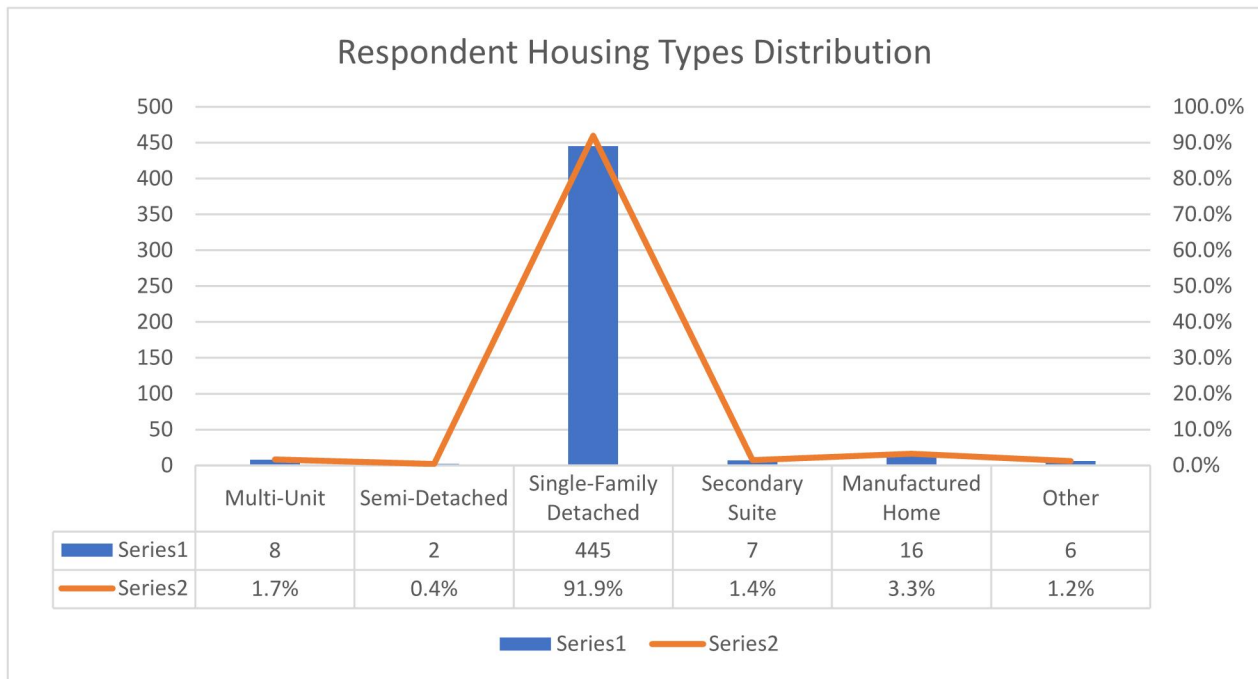
The response options were; multi-unit complex, semi-detached or duplex, single-family detached house, secondary suite (e.g. basement apartment, in-law suite), manufactured home (mobile, mini, or modular homes), or ‘other’ (please specify).

Question Results

- 484 responses; 4 skipped
- Question results shown in Figure 6.



Figure 6: Respondent Housing Distribution



In MODL, single-family detached housing, based on Census Canada 2016 data, represents 92.9% of the total housing stock.

'Other' Responses (6 responses analyzed)

The 'other' responses covered the four-plex category of housing not provided in the question as well as a discussing of various living arrangements.

Note: Questions 11 - 13 were skipped for the first report to accommodate all questions on housing for the May 13th Planning and Advisory Committee meeting. Questions 11 - 13 will be reported at the May 27th meeting.

Question 14 – What type(s) of housing does your community need the most?

Question Design

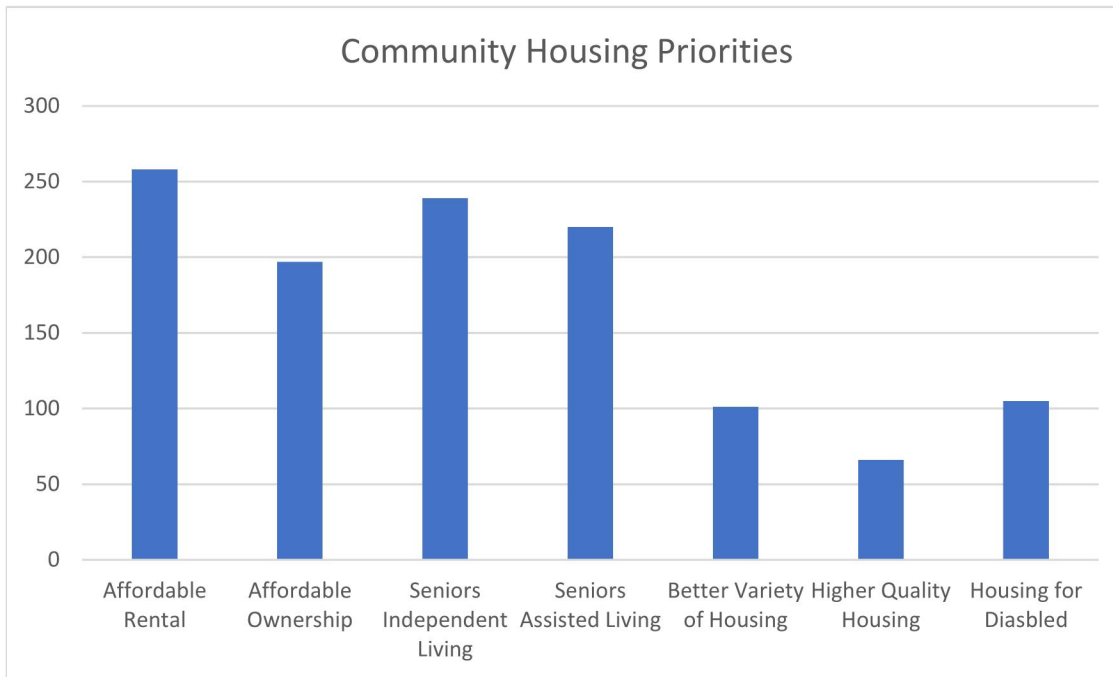
This question asked respondents to select one or more housing priorities for their community from the options of; affordable rental housing, affordable ownership options, seniors independent living, seniors assisted living, better variety of housing, higher quality housing, and/or housing for disabled.

Question Results

- 462 responses; 26 skipped
- Question results shown in Figure 7



Figure 7: Community Housing Priorities



Question 15 – Please explain your selection(s) for types of housing selection in Question 14.

Question Design

This question provided respondents the opportunity to explain in detail their community housing priority selection in Question 14.

Question Results

- 396 responses; 92 skipped
- 8 Major Themes

Theme 1 – Seniors (154 responses)

Responses focused on themes of limited service provision, affordability, lack of local options, and cost of living pressures.

“Seniors are mainly staying in their homes as long as they can and in many cases longer than they should from a safety perspective. Support services are wait listed so seniors are living marginally until they are in crisis, then they can no longer live independently. If we had more





affordable accessible supports to help seniors stay in their own homes, would go better. Distances to drive to groc, health care appointments are a problem, need a bus in rural areas.”

“We need all affordable housing...however, there are seniors living in rundown apartments without stoves and hot water. It’s heartbreaking.”

“We love our community and want to stay here as long as possible, but as we age, there are no options available to us locally.”

“I work closely with helping seniors in need, and those still living independently in our community and seriously struggling to pay their bills, ei. power, heat, food, medicine.”

Theme 2 – Market Conditions/Affordability (100 responses)

This theme developed from responses which emphasized the lack of affordable housing and the current market conditions (e.g. AirBnB effect, inter-provincial migration) which exacerbate the affordability challenge particularly on lower income households, youth, and seniors.

“We continue to see the increase of non residents of NS purchase our houses for over market value which increases to our housing crisis and raises our property taxes and the ability of our young population to purchase/find affordable housing. This crisis is going to increase 100% in the next year due to the markets currently. This needs to be looked at by all levels of government.”

“People have had to leave the area due to a lack of affordable housing. Businesses are not able to hire workers because of the lack of affordable housing.”

“Prices are going up for rentals and housing, and more and more people can't afford it. We must make sure that local families can buy houses despite the increasing competition on the real estate scene.”

“We are having a housing crisis. With higher real estate values, Lower income families who rent are in great danger of being evicted. This is happening now. We need MODL leadership for affordable/subsidized housing development.”

Theme 3 – Rental Accommodations (49 responses)

Responses related to rental accommodations focused on lack of availability, diminished affordability, and the effects on lower income households.

“It seems that rental property in non-existent in the Lunenburg area. Doesn’t matter what the cost is, there just isn’t any.”

“There are hardly any apartment rentals for people and what is available is too much money for most. It is getting very hard, especially for the poorer people in our municipality.”





“Those who can, look after themselves. Our community needs to have options for those who can't. Not all people should own homes BUT they must have access to safe, clean and affordable rental housing.”

Theme 4 – Youth (49 responses)

Responses focused on accommodating the specific youth housing needs, the importance to the community of retaining youth, and affordability for youth.

“We need to accommodate young single people and young families and to do that the housing needs to be affordable. Smaller sized houses and/or apartments would be an improvement but will require some flexibility from the zoning and planning departments”.

“Affordability would allow more young families to integrate into the rural landscape of the county thus increasing robustness of rural schools and the community as a whole.”

“I believe to welcome new and younger generations to the community there needs to be more variety and affordable housing for young families just starting out.”

Theme 5 – Housing for People with Disabilities (17 responses)

Responses focused on in the inadequacy of supply of housing appropriate for people with disabilities.

“I worry people with disabilities too often end up living prematurely in Long Term Care. There are too few high support community options for people with disabilities/and co-occurring medical needs. Options are limited: institutional, substandard or non existent (due to waiting lists).”

Theme 6 – Housing Condition (16 responses)

Responses focused on the need for quality housing in their community.

“I think our community needs more affordable rental options but also quality rental options. Some rental properties have no upkeep and are expensive for prospective tenants for poor quality.”

“Many are moving out of our area due to lack of rentals that are in good condition and reasonably priced. Many places for rent have mold or are unsuitable for families.”

Theme 7 – Other (65 responses)

Responses produced themes related to working with the development industry, programs aimed at keeping people in their homes, and the appropriate role of government with respect to housing and regulation.

“Affordable housing is a major issue here, whether rental or home ownership. We need to work with developers and landlord to ensure there are options for everyone and not just the few”

“What we need is more programs to help the people who live here now maintain and repair their homes so they can stay in them longer in comfort.”

“We need less Government intervention and regs, not more. Market conditions have always dictated the needs and wants of the people.”





“A hot real estate market and private rentals (e.g. AirBnB) has resulted in a dire need for affordable housing for both rentals and those looking to become homeowners. Without intervention our community will lose these groups and this will destabilize our communities. I don't want to live in a community of only AirBnB rentals and I want my kids to be able to live here if they should decide to do so.”

Correspondence Received Related to Survey Questions 9, 10, 14, & 15

A letter was received on March 23rd, 2021 from the South Shore Housing Action Coalition (SSHAC) which summarizes the group’s recommendations to be considered alongside the survey input from individuals. SSHAC contains members with a housing mandate in their professional responsibilities as well as members of the public and the group represents both Lunenburg and Queens County.

SSHAC’s primary recommendations are listed below, the full letter appears as Appendix A.

1. Engage in the development of rental units, assisted living units, transition housing, accessible units, and a greater diversity of housing types, on the South Shore.
2. Engage in the regulation and taxation of short-term rentals and second-home purchases and ownership.
3. Engage in rigorous quantitative and qualitative assessment of vulnerable populations living within MODL, as well as those forced to move away from the region due to inadequate housing and services provided locally.
4. Seek opportunities for collaboration with neighbouring municipalities in relation to all of the above-mentioned recommendations.

NEXT STEPS

Part Two of the ‘What We Heard Report’ will be presented at the Planning and Advisory Committee meeting scheduled for May 27, 2021. Following the Part Two presentation, Staff will recommend that the Planning and Advisory Committee utilize the public feedback derived from the MODL2040 Community Goals survey to develop a set of recommendations on the key themes, from the planning perspective, for Council’s consideration leading into their MODL2040 visioning workshop.





South Shore Housing Action Coalition

c/o Public Health Services, NSHA

215 Dominion Street, Suite 200

Bridgewater, NS B4V 2K7

sshousingaction@gmail.com

<http://sshac.ca>



SouthShoreHousingActionCoalition

@sshousingaction

March 23, 2021

Darren Shupe, Senior Planner

Municipality of the District of Lunenburg

darren.shupe@modl.ca

SSHAC submission for MODL2040 project

Dear Darren,

South Shore Housing Action Coalition (SSHAC)¹ is a community coalition seeking to build awareness and facilitate action on the need for improved access to healthy, safe and affordable housing options for all, at every stage of life. As residents of MODL and of neighbouring municipalities, SSHAC members have completed the MODL2040 Community Goals Survey. In addition, this letter addresses the urgent need for the improvement of housing options in the region.

There are several factors converging to create a shortage in the supply of suitable, adequate, and affordable housing of all types, in MODL and beyond. As outlined in the Background Report on Demographics & Housing, as well as in recent media reports, these factors include in-migration (permanent and seasonal), the increase in short-term rental operations, an ageing population, a frenzied real estate market and an ageing housing stock, to name these few. As a result, SSHAC calls for MODL's Planning & Development Services Department to consider the following recommendations for the MODL2040 project:

1. Engage in the development of rental units, assisted living units, transition housing, accessible units and a greater diversity of housing unit types, on the South Shore. We recognize that rental housing is an important option for a range of community members at every stage of life, and that the rate of rental housing in the region is very low. Whereas this matter is briefly addressed in Community Goals Survey, we recommend that MODL:
 - a. collect qualitative and quantitative data on rental housing, assisted living, transition housing and accessible units in the region;
 - b. seek opportunities to support the development of these housing types, through both non-profit and for-profit models;
 - c. restrict the possibility for affordable rental housing developments to be used for short-term rentals; and
 - d. through these actions, cultivate a cultural acceptance of rental housing as a permanent, long-term option for MODL residents.
2. Engage in the regulation and taxation of short-term rentals and of second-home purchases and ownership. We recognize that the proliferation of vacation rentals and seasonal homes is threatening the social and economic landscape by limiting the housing stock, competing directly with traditional tourist accommodation providers, and contributing to the inflation of property values. Moreover, whereas there are many types of short-term rental providers, we are especially concerned with the operation of entire apartments and houses as unlicensed and/or un-registered vacation rentals. We recommend that MODL:
 - a. collect specific quantitative and qualitative short-term rental data, including the rate of short-term rentals of entire apartments and houses, especially those offered by operators based outside of the region;

¹ For more information, visit our website at <http://sshac.ca>.

- b. encourage short-term rental providers, including those offering rentals locally and based outside of the region, to register their tourist accommodations with the province²;
 - c. develop revenue streams from short-term rentals, for example by implementing a municipal tax on tourist accommodation rentals, charging commercial tax rates to tourist accommodation providers, etc.; and
 - d. collect data about second-home sales and ownership, and consider a sales and/or taxation model applied specifically to second-home purchases and ownership.
3. Engage in rigorous quantitative and qualitative assessment of vulnerable populations living within MODL, as well as those forced to move away from the region due to inadequate housing and services provided locally. From an intersectional perspective, we recognize that vulnerability relates to gender, race, nationality, class, age, physical and cognitive (dis)ability, family structure, education, etc. However, social differences are not addressed in the Community Goals Survey. We recommend that MODL:
 - a. collect primary and/or secondary data, especially qualitative data, relating to the experiences of a range of vulnerable populations both within, and excluded from, the region; and
 - b. seek opportunities for accessing and/or developing relevant research agendas by engaging with experts, including universities, local non-profit organisations and housing advocacy organisations.
4. Finally, seek opportunities for collaboration with neighbouring municipalities in relation to all of the above-noted recommendations. For example, Energize Bridgewater and the newly implemented Coordinated Access System are important community-based initiatives in the region.

As this letter highlights, the improvement of housing options in the region is a complex matter requiring immediate attention. SSHAC is committed to ongoing participation in, and support of, the MODL2040 planning and development process. We look forward to connecting with MODL again.

Sincerely,

Myra Coulter, Kelly Goudie, Helen Lanthier
On Behalf of the South Shore Housing Action Coalition

Healthy, affordable housing options for all, at every stage of life

² Information regarding tourist accommodation registration can be found here: <https://beta.novascotia.ca/register-your-tourist-accommodation>



Municipality of the District of Lunenburg

Background Report 01F

SUBMITTED BY: Byung Jun Kang, Planner

DATE: March 18, 2021

RE: Population Projection 2040 (Updated)

EXECUTIVE SUMMARY

- A revised population projection indicates that there will be 25,508 residents in our municipality in 2040. This is less than 1 percent difference from the current population.
- The age demographics will look different in 2040, as the average age of our residents increases from 37.4 years in 1990 to 46.7 years in 2015 and 68.4 years in 2040.
- This aging trend was contributed by the retirement of Baby Boomers, the in-migration of Generation X, and the out-migration of Generation Z.
 - The number of births will significantly decline due to the low fertility rate, the low number of adult women, and the unstable economy.
 - The number of deaths will significantly rise due to the Baby Boomers reaching the end of their life expectancy in 2040. The natural growth rate, which is the difference between the birth rate and the death rate, has been in the negative since 1985.
 - The number of immigrants is expected to rise which will offset the aging trend.
 - The net interprovincial migrants will contribute to the population growth, but most of the migrants are about to retire in the next couple of decades.
 - The number of net intraprovincial migrants and the net non-permanent residents were negligible to influence the population projection.
- Despite the steady population, the number of households will rise by 36.3%, from 11,010 households in 2015 to 15,004 households in 2040.
- This large growth in the number of households is derived from the decrease in the household size from 2.7 people in 1990 to 2.2 people in 2015 to 1.7 people in 2040.
- A smaller household size will increase the demand for housing – specifically for small houses and long-term rental accommodations – despite the anticipated decline after 2030.

INTRODUCTION

A population projection is the first background information acquired to draft a municipal planning strategy. The future population serves as a basis to major planning policies, such as the spatial distribution of new migrants, the type of housing to accommodate residents based on the demographics, their demands for jobs, recreation, and other municipal services.

In early 2020, the Planning & Development Services Department of the municipality conducted research on the future population of our municipality by 2040, which is the target year for the new municipal planning strategy. This is based on the past census data, the recent building statistics, and the future projection of socioeconomic and demographic shifts that influences population growth. More information is available in MODL2040 Report 1B.

The target population in 2040 as identified in Report 1B is 22,024. This is under the assumption that the population decline will be expedited due to the Baby Boomer generation starting to reach the end of their lifecycle after 2035. However, after receiving the population statistics for 2020 from Nova Scotia Department of Finance and Treasury Board, it is clear that the COVID-19 pandemic had a significant impact on the net interprovincial migration in 2020. After a careful evaluation, staff also discovered errors in Report 1B – one of them is census years being assumed as 4 years, instead of 5 years. This report corrects the errors in its previous version and integrates more sophisticated methods of projecting future population.

BACKGROUND

Typically, two major approaches exist to execute the model at a local level: extrapolation and prorating. Staff determined that extrapolation – a continuation of past growth rate to project population counts – is not appropriate for this research because the approach aggregates the components of population change. In other words, staff would not be able to identify what caused the population changes with extrapolation.

The prorating projection tools rely on the projection of a higher-order area to project the population of a lower-order area. The tools are used by Nova Scotia Department of Finance and Treasury Board staff in Nova Scotia to project the future population at county-level and municipal-level:

Our approach to smaller geographies has been to start with a provincial projection (for which components of change are readily available) based on a component-cohort model and then share the population by age and sex cohort down to the sub-provincial level based on existing trends. It is a simplified approach as it carries a lot of assumptions, but it might make your task easier (T. Storrington, personal communication, February 16, 2021).

The prorating approach is used assuming that similar population patterns exist for both lower and higher orders of the areas. However, the 5-year population change of Nova Scotia has been, on average between 1981 and 2016, 0 to 2 percent more than the 5-year population change of the municipality. This is likely because of the faster rate of growth in Halifax Regional Municipality influencing the overall provincial growth. The municipality's growth has never outpaced the provincial growth; therefore, the assumption may not be true in this research.

Staff concluded, for higher preciseness, to conduct a population projection of the municipality independent from Nova Scotia population projection as much as possible to eliminate regional differences within the Province of Nova Scotia.

METHOD

This research was conducted by applying the cohort-component projection model, which is used around the world since the early 20th century. The users of this model include the United Nations (1989), Statistics Canada (2015), the United States of America (2017), and Nova Scotia (2020). The cohort-component projection model has numerous advantages as the model is highly effective at producing plausible projections despite its simplicity (Statistics Canada, 2015). In essence, the model may be summarized into the following equation:

Population (future) = Population (present) x Survival Rate + Births + Net Migrants

1. obtain or calculate a 5-year survival rate for each cohort;
2. multiply the present population counts for each cohort by a respective survival rate;
3. add the expected number of births for 5 years by using the age-specific fertility rate, the number of survived women, the baby gender ratio, and the survival rate;
4. calculate a net migration rate for each cohort; and
5. and the expected net number of migrants for 5 years by using the survived population including the survived newborns, and a net migration rate for each cohort.

Survival rate. A survival rate is the proportion of people in a cohort who would still be alive in at a future date in time. The rate may be obtained directly from Statistics Canada or be derived by converting the mortality rate with a life table. The rate is based on an average of age-specific mortality rates for a 3-year time period. A percent error should be calculated with the actual number of deaths in a previous census.

Births. The number of live births can be calculated by multiplying the number of survived women, the age-specific fertility rate, and the number of years in a projection period which is 5. The number of live births are proportioned by gender, and then multiplied by a respective survival rate to consider infant mortality. A percent error should be calculated with the actual number of births in a previous census.

Net migration rate. Obtaining the number of net migrants is more challenging than obtaining the number of births and deaths as there is no mandatory registration of residence in place. An indirect way of measuring the number of net migrants is to assume that the population changes not accounted by the number of births and deaths are due to migration. The 2 major methods of estimating net migration are the forward method, where all migration occurs at the end of census year, and the reverse method, where all migration occurs at the beginning. Typically, the average of the 2 methods is used to estimate the net migration, summarized in the following equation:

$$\text{age and gender specific net migration rate} = \frac{P_1 \left(1 + \frac{1}{s}\right) - P_0(1 + s)}{2P_1}$$

where:

- P_1 : Age-and-gender-specific population count, present census
- P_0 : Age-and-gender-specific population count, past census
- s : Age-and-gender-specific survival rate

Statistics Canada (2021c) calculates the components of population change at the county level for each calendar year. This data should be used to calibrate the net migration rates.

DATA SOURCES

Most of the data regarding components are only available at a provincial level with a few exceptions: population counts are available by municipality and the actual number of births and deaths are available by county. This research uses the following data and sources:

- Population counts, MODL: Statistics Canada (1991, 1996, 2001, 2007, 2012, 2017)
- Age-specific fertility rate, Nova Scotia, 2015-2019: Statistics Canada (2021)
- Age-specific survival rate by gender, Nova Scotia, 2013-2019: Statistics Canada (2021b)
- Live births by gender, Nova Scotia, 2016-2020: Nova Scotia (2021a)

VERIFICATIONS

Percentages of error have been calculated for the components of population changes:

- Percentage of error, live births = 22.1% (below average accuracy);
- Percentage of error, deaths = 19.1% (average accuracy); and
- Percentage of error, net migrations = 80.1% (extremely low accuracy).

An error may have derived from using the prorated components from Lunenburg County data as the expected value, which has been estimated by Statistics Canada. No data on the components of population change is available at a municipal level. Because of the significant percentage of error, these projected components data should not be used.

RESULTS

By following the method, a base population projection is obtained as shown in Scenario 7. For quality control purposes, the base projection is compared with other projections that are based on different assumptions, methods, and sources. Scenario 7 matched closely with Scenario 4 – Statistics Canada’s Medium Growth Scenario. Each scenario is described as follows:

Scenario 1 – Extrapolation (Post-Pandemic). Scenario 1 assumes that the trend of population growth experienced between 2016 and 2021 would continue towards the target year. A growth of 3.14% per 5 years was used to approximate the projected population of the municipality as 29,021 in 2040. This scenario is very unlikely as it assumes the net migration to be about 160% more than the number of births.

Scenario 2 – Extrapolation (Pre-Pandemic). Scenario 2 assumes that the population decline experienced between 2001 and 2006 would continue towards 2040. A decline of 1.59% per 5 years was used to approximate the projected population of the municipality as 24,029. This scenario is also very unlikely as it does not reflect the emerging trend of increasing net interprovincial migration after 2016.

Scenario 3 – Prorating (Canada Low Growth). Scenario 3 assumes that the municipality would follow the similar population trend as Projection Scenario LG (low-growth) of Statistics Canada to reach the projected population of 24,637 in 2040. The assumptions include:

- the total fertility rate reaches 1.40 children per woman in 2042;
- life expectancy reaches 85.6 years for males and 88.8 years for females in 2067;
- interprovincial migration is based on the trends observed between 1991 and 2016;
- the immigration rate reaches 0.65% in 2042;
- the annual number of non-permanent residents reaches 1,080,910 in 2042; and
- the net emigration rate reaches 0.18% in 2042.

Scenario 4 – Prorating (Canada Medium Growth). Scenario 4 assumes that the municipality would follow the similar population trend as Projection Scenario M2 (medium-growth) of Statistics Canada, which is similar to Projection Scenario FA (fast-aging), to reach the projected population of 25,655 in 2040. The assumptions include:

- the total fertility rate reaches 1.59 children per woman in 2042;
- life expectancy reaches 87.0 years for males and 89.0 years for females in 2067;
- interprovincial migration is based on the trends observed between 1991 and 2016;
- the immigration rate reaches 0.83% in 2042;
- the annual number of non-permanent residents reaches 1,397,060 in 2042; and
- the net emigration rate reaches 0.15% in 2042.

Scenario 5 – Prorating (Canada High Growth). Scenario 5 assumes that the Municipality would follow the similar population trend as Projection Scenario HG (high-growth) of Statistics Canada to reach the projected population of 28,186 in 2040. The assumptions include:

- the total fertility rate reaches 1.79 children per woman in 2042;
- life expectancy reaches 88.0 years for males and 91.3 years for females in 2067;
- interprovincial migration is based on the trends observed between 1991 and 2016;
- the immigration rate reaches 1.08% in 2042;
- the annual number of non-permanent residents reaches 1,994,400 in 2042; and
- the net emigration rate reaches 0.13% in 2042.

Scenario 6 – Base Projection (1990-2015 Net Migration). Based on the cohort-component projection model, Scenario 6 assumes the net migration is based on the trends observed between 1991 and 2016 to reach the projected population of 24,638 in 2040. This scenario returns a similar result as Scenario 3 (Canada Low Growth).

Scenario 7 – Base Projection. Based on the cohort-component projection model, Scenario 7 assumes the net migration is based on the trends observed between 2011 and 2016 to reach the projected population of 25,508 in 2040. This scenario returns a similar result as Scenario 4 (Canada Medium Growth).

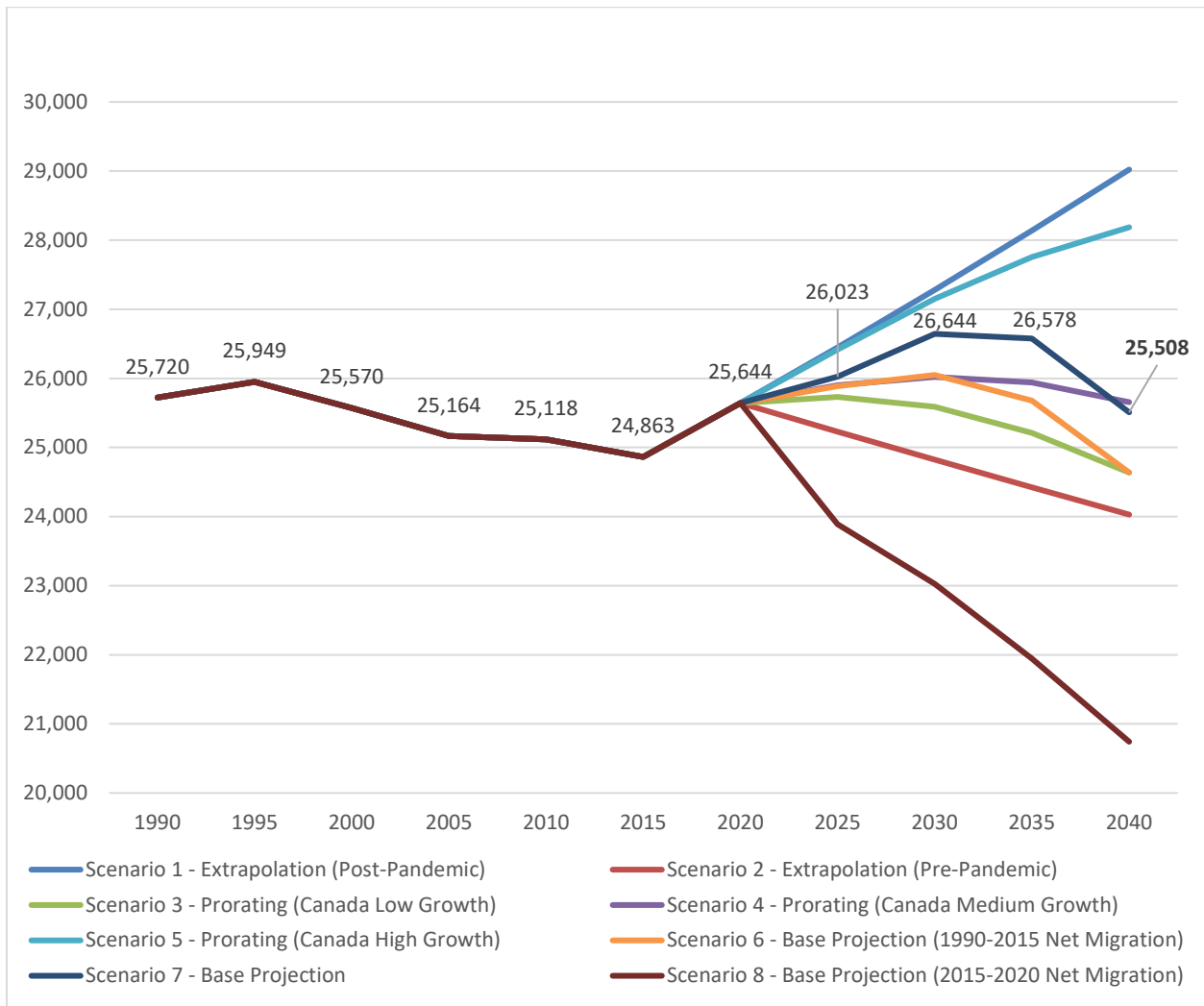
Scenario 8 – Base Projection (2015-2020 Net Migration). Based on the cohort-component projection model, Scenario 8 assumes the net migration is based on the trends estimated between 2016 and 2020, as identified by Statistics Canada (2021c), to reach the projected population of 20,742 in 2040. This scenario is assumed to be very unlikely based on a significant difference of projected population count from the rest of scenarios.

Scenario 9 – Prorating (Nova Scotia Medium Growth). Scenario 9 is the population projection conducted by Nova Scotia Department of Finance & Treasury Board in 2021, to reach the projected population of ????? in 2040 [Note: to be provided by NS Finance in mid-April 2021].

All 9 scenarios are displayed in Figure 1 for comparison. Scenario 7, the base scenario is deemed as the most likely one from a statistic point of view because the population count of Scenario 7 is similar to the average population count of the 2 extreme scenarios – Scenarios 1 and 8. The base scenario is also returned a similar projection as Scenario 4, which is designated as the most likely scenario for future population by Statistics Canada.

Figure 1

Population counts and projection scenarios for the MODL between 1990 and 2040



Note: This graph shows the projected population counts between 2020 and 2040 based on the 9 scenarios with different assumptions, methods, and sources. Scenario 7 in a navy blue line is the base projection to be used as the primary projection for the municipality.

Sources: Nova Scotia (2021a) and Statistics Canada (2017, 2021, 2021b)

ANALYSIS

The population count of our municipality in 2040 is projected to be 25,508 under the base scenario. This is only a 0.53% difference from the estimated population of 25,644 in 2020. The municipal population is expected to peak at 26,644 people in 2030, and then to decline again to reach the population of 25,508 in 2040. Some of the key findings are as follows:

Aging demographic. While the population trend looks steady for the next 20 years, the age demographic of the municipality will change drastically. Figures 2 and 3 show the current and projected age demographics as population pyramids. The average age is expected to increase from 46.7 years in 2015 to 68.4 years in 2040, which will be one of the highest average age in Canada. One of the contributing factors to this aging trend is the low birth rate and the low number of adult women. For example, the birth-death ratio was near 1-to-1 in 1990, but by 2020, the number of deaths surpassed the number of births by 68%.

Increase in interprovincial migrations. A positive change in interprovincial migrations occurred in the last decade, initiated by the oil crash in 2014 and accelerated by the global pandemic in 2020 for different reasons. The number of net interprovincial migrants between 2015-2020 was almost 4 times larger than the number of net international migrants, while the net intraprovincial migrants being negligible. Without the interprovincial in-migrants, the municipality would not be able to sustain its population base.

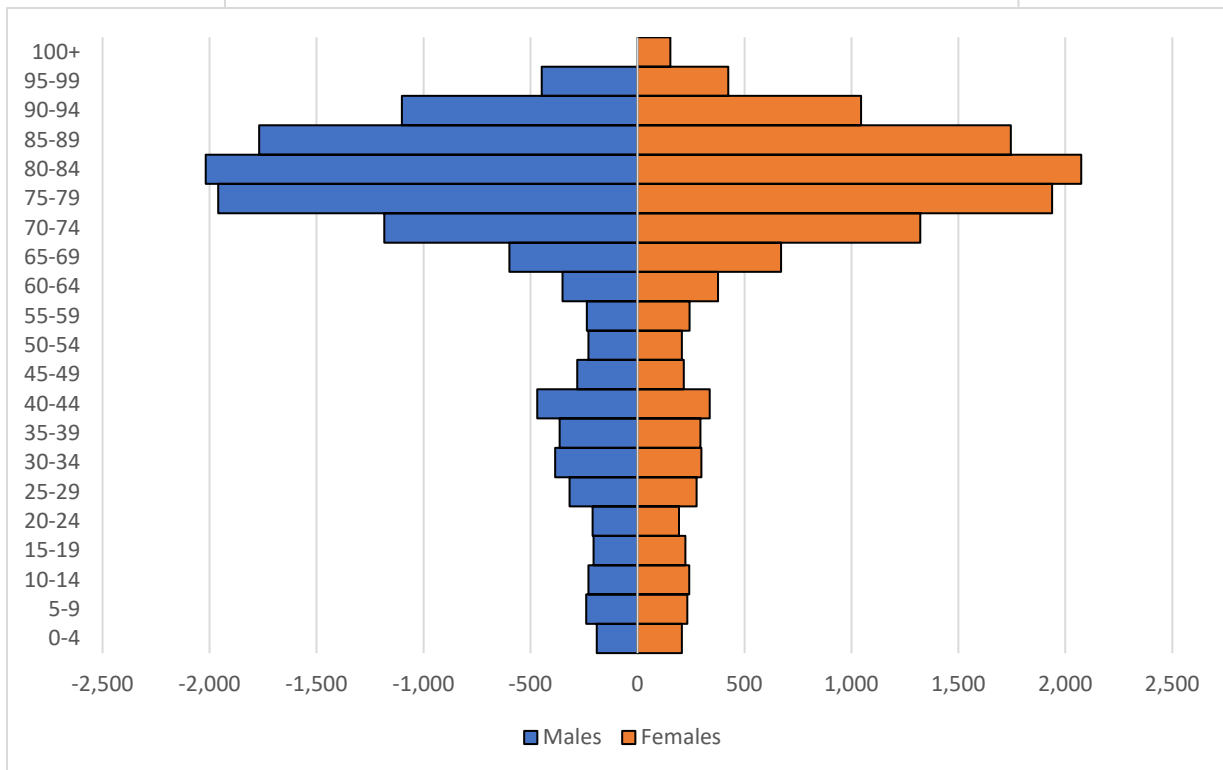
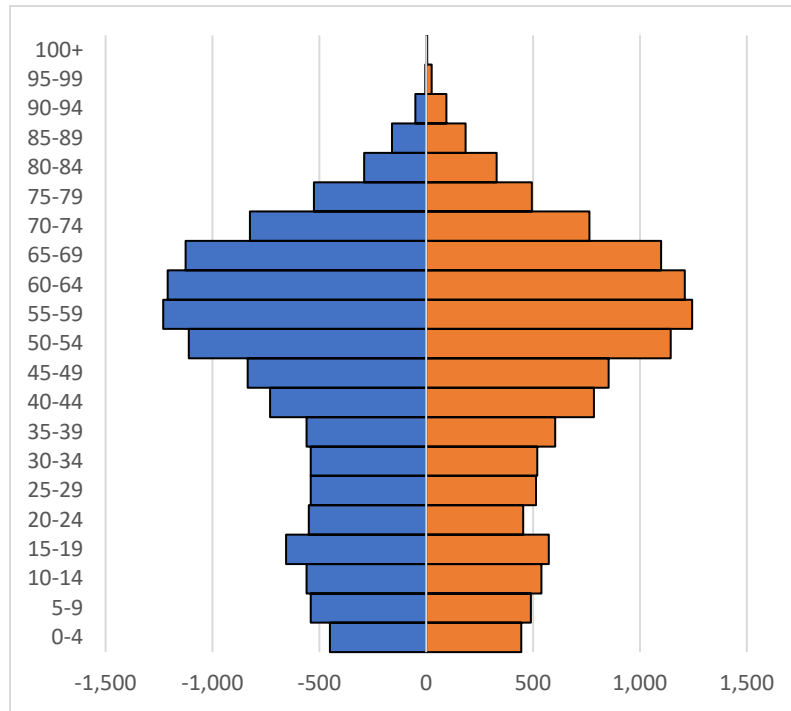
Age of in-migrants. Between 2015-2020, 50.3% of migrants to Lunenburg County were aged between 45 and 65 years, while those aged between 20 and 24 years recorded the largest cohort to move out of the County (Statistics Canada, 2021c). This expedites the trend of aging.

Population crash in 2050. Although the population count is likely to be similar to 2020 in 2040, the rate of population change will become negative starting in 2030. This is because of the large increase in the mortality rate of Baby Boomers as they start to reach the life expectancy, overwhelming the numbers of births and net migrants into the municipality.

Household projection. In contrast to the steady population change rate, the number of households is expected to increase significantly from 11,010 households in 2015 to 15,004 households in 2040 – a 36.3% increase. This large growth in the number of households is derived from the noticeable decrease in the household size from 2.7 people in 1990 to 2.2 people in 2015 to 1.7 people in 2040. A smaller household size will increase the demand for housing – specifically for small houses and long-term rental accommodations – despite the anticipated decline of population in a longer term.

Figures 2 (above) and 3 (below)

Population pyramids for the MODL in 2015 (Figure 2) and 2040 (Figure 3)



Watch an animation of the pyramids: <https://public.flourish.studio/visualisation/5536339/>.

DISCUSSION

Despite reflecting the recent population growth into the projection, the long-range trend of future population change is still on a negative slope. This trend was contributed by the following 3 factors: the retirement of Baby Boomers (born between 1945-1965), the in-migration of Generation X (born between 1966-1980), and the out-migration of Generation Z (born between 1997-2012).

External factors are also contributing to the aging community. The deteriorating economic positions of young adults, increasing postsecondary education, shifting values around childbearing, and skyrocketing cost of housing are linked to the continuation of fertility postponement for the next 2 or 3 decades (Statistics Canada, 2019). A drop in the birth rate, combined with outmigration of young adults, results in the overpowering number of mortality over fertility – despite the increase of life expectancy.

CONCLUSION

While the results from this population projection were tested numerous times against multiple scenarios with different external factors influencing population changes, errors are inevitable as predictions become challenging the further they are from the base census year. This research was also conducted based on the data from Census 2016. As the next census is scheduled for May 2021, the estimated values for 2020 and the population projection should be updated once the new data is available.

The result of this projection may be the foundation for other research in different sectors, such as a housing needs assessment, a municipal fiscal strength projection, and a demand analysis for municipal services.

This research would not have been possible without the contribution from experts in other levels of jurisdiction. Municipal staff would like to thank other staff in the following departments for their assistance:

- Statistics Canada, Vital Statistics Division;
- Nova Scotia Department of Finance & Treasury Board, Economics & Statistics Division (Thomas Storrington, Director, thomas.storrington@novascotia.ca; Alexander Chute, senior economist, alexander.chute@novascotia.ca); and
- Service Nova Scotia and Internal Services, Vital Statistics Division (Sarah Galloway, Research and Statistical Officer, sarah.galloway@novascotia.ca).

Department: Planning & Development Services

Report prepared by: Byung Jun Kang, Planner

Date: 2021-03-18

References

Nova Scotia. (2020). *Nova Scotia Annual Population Estimates as of July 1, 2020*. Retrieved from https://www.novascotia.ca/finance/statistics/archive_news.asp?id=9932&ym=3

Nova Scotia. (2021). *NS Births and Deaths with Rates and Natural Increase*. Retrieved from <https://data.novascotia.ca/Population-and-Demographics/NS-Births-and-Deaths-with-Rates-and-Natural-Increa/r794-fttm>

Nova Scotia. (2021a). *NS Births by Weight and Grouped by Sex*. Retrieved from <https://data.novascotia.ca/Population-and-Demographics/NS-Births-by-Weight-and-Grouped-by-Sex/4xz3-5kij>

Statistics Canada. (1991). *Census of Population, Statistics Canada Catalogue no. 95F0168X*. Retrieved from <https://www12.statcan.gc.ca/English/census91/data/profiles/Rp-eng.cfm?TABID=2&LANG=E&APATH=3&DETAIL=1&DIM=0&FL=A&FREE=1&GC=0&GID=33305&GK=0&GRP=1&PID=29&PRID=0&PTYPE=89103&S=0&SHOWALL=No&SUB=0&Temporal=2006&THEME=113&VID=0&VNAMEE=&VNAMEF=&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0> (accessed February 9, 2021).

Statistics Canada. (1996). *Census of Population, Statistics Canada Catalogue no. 95F0181XDB96001*. Retrieved from <https://www12.statcan.gc.ca/english/census96/data/profiles/Search.cfm> (accessed February 9, 2021).

Statistics Canada. (2001). *Census of Population*. Retrieved from <https://www12.statcan.gc.ca/english/profil01/CP01/Details/Page.cfm?Lang=E&Geo1=CSD&Code1=1206001&Geo2=PR&Code2=12&Data=Count&SearchText=Lunenburg&SearchType=Begins&SearchPR=01&B1=All&Custom=> (accessed February 9, 2021).

Statistics Canada. (2007). Lunenburg, Nova Scotia (Code1206001) (table). *2006 Community Profiles. 2006 Census*. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E> (accessed February 9, 2021).

Statistics Canada. (2012). Lunenburg, Nova Scotia (Code 1206001) (table). *Census Profile. 2011 Census*. Statistics Canada Catalogue no. 98-316-XWE. Ottawa. Released October 24, 2012. Retrieved from <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/index.cfm?Lang=E> and <https://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/details/Page.cfm?Lang=E&Geo1=CSD&Code1=1206001&Data=Count&SearchText=Lunenburg&SearchType=Begins&SearchPR=01&A1=All&B1=All&GeoLevel=PR&GeoCode=10#tabs1> (accessed February 9, 2021).

Statistics Canada. (2015). *Population Projections for Canada (2013 to 2063), Provinces and Territories (2013 to 2038): Technical Report on Methodology and Assumptions*. Statistics Canada Catalogue no. 91-620-X. Retrieved from <https://www150.statcan.gc.ca/n1/pub/91-620-x/2014001/chap01-eng.htm>

Statistics Canada. (2017). Lunenburg, MD [Census subdivision], Nova Scotia (table). *Census Profile. 2016 Census*. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed February 9, 2021).

Statistics Canada. (2019). *Population Projections for Canada (2018 to 2068), Provinces and Territories (2018 to 2043): Technical Report on Methodology and Assumptions*. Retrieved from <https://www150.statcan.gc.ca/n1/pub/91-620-x/91-620-x2019001-eng.htm> (accessed February 9, 2021).

Statistics Canada. (2021). *Table 13-10-0418-01: Crude birth rate, age-specific fertility rates and total fertility rate (live births)*. doi: 10.25318/1310041801-eng. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310041801>

Statistics Canada. (2021a). *Table 13-10-0710-01: Mortality rates, by age group*. doi: 10.25318/1310071001-eng. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310071001>

Statistics Canada. (2021b). *Table 13-10-0114-01: Life expectancy and other elements of the life table, Canada, all provinces except Prince Edward Island*. doi: 10.25318/13100711401-eng. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=13100711401>

Statistics Canada. (2021c). *Table 17-10-0140-01: Components of population change by census division, 2016 boundaries*. doi: 10.25318/1710014001-eng. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710014001>

United Nations. (1989). *Module One: Conceptual issues and methods for preparing demographic projections*. Projection methods for integrating population variables into development planning. ST/ESA/SER.R/90. Retrieved from <https://www.un.org/en/development/desa/population/publications/pdf/manuals/projections/module1/chap2.pdf>

United States of America. (2017). Population Projection. Retrieved from <https://www.census.gov/programs-surveys/popproj/about.html#:~:text=In%20the%20cohort%2Dcomponent%20method,rates%20and%20net%20international%20migration>