# Mission Statement:

The world is aging. The first of the baby boomers have turned 70, and with longer life expectancies and lower birth rates Nowhere is the worldwide aging trend more evident than in the province of Nova Scotia, home to the oldest population in Canada. As of 2017, 19.9% of the population was aged 65 or older. By 2030, this number is expected to rise to one in four Nova Scotians (NS Shift Action Plan). As Nova Scotians continue to age, so does the demand for health care services and home facilities.

In addition, Nova Scotia’s population remains quite spatially isolated – more than twice as many people live in rural communities relative to the Canadian average. This is exacerbated by the fact that in the past, economic conditions drove many people to seek employment in other provinces. This has left an aging population with much less family support than in other regions. Rita Lajeunesse, 76, says "The problem with Nova Scotia is that a lot of us don't have the supports of our children here because they had to leave for employment. That's a hard thing for seniors here — lack of support.”

The SeniorServe app aims to help people like Rita by providing information about access to appropriate and affordable housing, in-home support, social connections and nearby services - factors listed as key elements to keeping older adults healthy. SeniorServe helps our aging population and those who care for them, even from abroad, ensure that they have access to suitable facilities and services. Through this app, we hope to support aging in place by drawing attention to the availability of facilities provincewide.

# App Description:

This Web application was created using ESRI's WebApp Builder as a part of the ESRI Canada Centre of Excellence AppChallenge 2020. The data used in this app are derived from the Nova Scotia Open Data Catalogue available at this location: <https://data.novascotia.ca>, and include the following datasets:

* *Surgical Wait Times*
* *Location of Hospitals*
* *Long Term and Residential Care Facilities*
* *Long Term and Residential Care Facilities Directory (*[*Link*](https://novascotia.ca/dhw/ccs/documents/nursing-homes-and-residential-care-directories.pdf)*)*
* *Public Housing Units for Seniors*
* *Nova Scotia Communities Engaged in Age-Friendly Community Planning*
* *Bingo Licenses*
* *Metropolitan Regional Housing Authority*
* *Nova Scotia Counties with Senior Safety Programs*

Spatial joins and domains were used to add additional geographic information to some of the datasets, such as bingo licenses and surgical wait times, allowing these data to be queried by county. The number and types of beds available at Long Term Care Facilities was summarized for easy searching.

Older adults are known to require significantly more health care services and surgeries, and thus the locations of hospitals and similar care facilities has been noted. Keeping older adults socially connected has been described as the number one emerging issue facing seniors in Canada and the app therefore highlights the locations of registered Bingo games as this is a common hobby of this age demographic which allows participants to socialize. Seniors are also known to be disproportionately targeted for certain crimes, and thus, police centres with Senior divisions have also been highlighted.

Several widgets can help users navigate the information available in the app: Nearby Facilities, Find Facilities by Location, Find Facilities by Amenities, Results Summary, and Surgical Wait Times.

**Nearby Facilities** allows the user to either search an address, use their current position on the map, or interactively point to a location on the map and see a summarized list of either Senior Safety Programs, Public Housing Units or Bingo Facilities based on the buffer zone. By clicking on a listed result, the user can see the approximate distance from their chosen location along with summarized information about the selected feature.

**Find Facilities by Location** helps users find facilities like Long-Term Care Centres, Public Housing designated for Seniors or Hospitals across Nova Scotia based on either the name of a community or a county. Once a location is selected, the map will zoom to that location and display the features that fall within the selected region. The Results widget can also be launched to see details about the amenities within the area.

**Find Facilities by Amenities** allows users to the locations of facilities of interest based on several parameters. For example, users can choose a surgical procedure they are looking for e.g. Knee Replacement and the map shows the locations of hospitals that provide that surgery. This does require enable the filters to apply by toggling the switch on. More details about the results can be viewed in the Results widget.

**The Results Summary** provides a count of the various facilities that are visible in the map extent and meet the criteria of the filters. The results change dynamically based on the zoom level.

Finally, the **Surgical Wait Times** widget gives users an overview of the surgical wait times across the province of Nova Scotia. The user can select their desired procedure, and view information about the locations that offer that surgery including the average wait time and average consultation time. Clicking a result in the Results pane will zoom to that medical facility on the map.

Together, these tools provide the user with a sense of the health care, community support, and housing for seniors in various areas of the province. Since many older adults prefer physical copies, users are to not only bookmark various locations, but also print the map at those extents. Throughout the app, users can easily find contact information for the various facilities and organizations should they want to phone, email, or look them up on the web.

# Data Sources:

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* Public Housing Units
* Nova Scotia Communities Engaged in Age-Friendly Community Planning
* Bingo Licenses
* Metropolitan Regional Housing Authority
* Nova Scotia Counties with Senior Safety Programs.

# References:

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Nova Scotia Department of Seniors. 2017. Shift: Nova Scotia’s Action Plan for an Aging Population. Halifax: Province of Nova Scotia.

Statistics Canada (May 3, 2017) 2016 Census of Population - Age (in Single Years) and Average Age (127) and Sex (3) for the Population of Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations, 2016 and 2011 Censuses. Statistics Canada Catalogue no. 98-400-X2016001.

# Disclaimer:

The information provided by this application "SeniorServe" is created for general and educational purposes only and is not a substitute for professional advice.