Section 5.1

Statements of Provincial Interests

- Table of Contents -

Introduction

- Implementation Guidelines -
Statements of Provincial Interest

What are these Implementation Guidelines?

These Implementation Guidelines (Guidelines) are designed as a tool to assist municipalities:

- more fully understand Statements of Provincial Interest (Statements);
- offer suggestions for techniques that may be used in municipal planning documents; &
- indicate what the Service Nova Scotia and Municipal Relations expects with respect to municipal planning documents.

They are written for elected officials, planning advisory committees, municipal planners and the public.

What are Statements of Provincial Interest?

They are policy statements adopted by the provincial government under the powers of the *Municipal Government Act* (MGA). They are set out in Schedule "B" of the MGA and came into effect on April 1, 1999. There are five Statements in effect. They deal with:

- Drinking Water Supplies,
- Flood Risk Areas,
- Agricultural Land,
- Infrastructure, and
- Housing.

Statements of Provincial Interest are adopted by the Province to identify the provincial interest in the use and development of land (MGA section 193). The Province's interests in land are many and varied. These may include matters such as: protection of our environment; our natural resources such as agriculture or forest lands; or investments such as those for sewer and water facilities. Statements adopted under the MGA are but one means for expressing the Province's interest in the use and development of land. Legislation, guidelines, and programs are examples of other means.

The MGA provides for the adoption of additional Statements in the future where the Province believes a Statement is necessary to protect it's interests.

What affect do Statements have?

The MGA requires that municipal planning documents (defined in the MGA - Section 196 and also Schedule B) must be "reasonably consistent" with these Statements. Reasonably consistent (defined in Schedule B - Implementation section) means that municipalities must take reasonable steps to apply the relevant statements to the local situation when preparing or amending planning documents.

The Statements do not provide rigid standards, but instead set the direction and provide a framework for dealing with the issue. Overall, no Statement is intended to take precedence over any other. Instead local circumstances and informed, thoughtful decision making will dictate how the Statements should be applied and hence the form of development or resource use which should take precedence. These Guidelines are intended to assist in this decision making process.

Clearly municipalities are expected to act in a manner that is reasonably consistent with the Statements or indicate the reasons for not doing so. The details of how this is presented in planning documents is a municipal decision. One approach which has considerable merit is to have a separate section in the Municipal Planning Strategy dedicated to the Statements. This section could include such things as which Statements apply to the planning area and what policies the municipality is establishing to address them.

What exactly is in Schedule "B" of the MGA?

Schedule B of the MGA has four components:

- Introduction,
- Definitions,
- Statements (five separate policy areas), and
- Implementation.

The Introduction provides the context for the individual Statements. It points out that the Statements are "guiding principles" for municipalities as well as the Province and individual citizens for decisions on land use matters.

The Definitions section defines specific terms used in the Statements.

The Statements form the main part of Schedule "B" and this section is the focus of these Guidelines. Each of the five Statements includes a:

- Goal - the purpose or objective of the particular Statement;
- Basis - the reasons or rationale for the Statement;
- Application - the area to which the Statement applies, whether it is a specific geographic area, as in the case of Flood Risk Areas, or more widely applied, as in the case of Housing; and

- Provisions - the specific actions that should be taken or measures put into effect to meet the requirements of the Statement.

The Implementation section provides additional guidance regarding the municipal and provincial implications of these Statements. In some cases this takes the form of reinforcing what has already been said in the MGA, while in others it gives additional direction.

How are the Guidelines organized?

Each Statement (e.g. agricultural land, housing) has a separate Guideline. Every Guideline includes direct quotes of the text from Schedule "B" for that respective Statement (shown in text boxes) followed by explanatory or interpretive information as required. This material is presented in the same order as it appears in Schedule "B" - Goal, Basis, Application and Provisions. The Provisions section forms the heart of these Guidelines.

For purposes of convenience, a Definition section is included at the end of each Guideline. The definitions are taken directly from Schedule "B" and are only those that apply to that particular Statement. Words shown in bold and italicized type face (font) in a Guideline are terms which are defined in Schedule "B."

Some of the Guidelines, such as those for Drinking Water, Flood Risk Areas and Agricultural Land, also include attached reference maps to assist in identifying the areas to which they apply.

These Guidelines, as well as associated mapping, are available on the Service Nova Scotia and Municipal Relations Website at **www.gov.ns.ca/snsmr**

-Guideline 1 -

Drinking Water

GOAL:

- To protect the quality of drinking water within ***municipal water supply watersheds***

BASIS:

- A safe supply of drinking water is a basic requirement for all Nova Scotians.
- Inappropriate development in ***municipal water supply watersheds*** may threaten the quality of drinking water.
- Some water supply watersheds are located outside the municipality using the water. The municipality depending on the water therefore has no direct means of protecting its supply.

APPLICATION OF THE STATEMENT

This statement applies to all ***municipal water supply watersheds*** in the Province including surface watersheds and ***groundwater recharge areas***.

All surface watershed areas (watersheds) and ***groundwater recharge areas*** (recharge areas) which are the existing or identified future source of drinking water for municipally owned/operated water utilities are subject to this Statement. Additional future sources of municipal drinking water, once identified, will automatically be subject to this Statement.

Besides municipal water supplies, private, community, or First Nations owned/operated drinking water supplies also exist in Nova Scotia. These are not the focus of this Statement. Still, municipalities and other water supply operators are encouraged to work with the Province and identify and protect the quality of the drinking water in these watersheds and recharge areas.

PROVISIONS OF THE STATEMENT

1)	***Planning documents*** must identify all *municipal water supply watersheds* within the planning area.

The municipality carrying out the planning exercise must identify all water supply watersheds (including both watersheds and recharge areas) for any municipally owned/operated drinking water supplies in the planning area. This includes not only those of the municipality preparing the ***planning documents*** but also any watersheds and recharge areas of municipal water supplies of other municipalities that fall within the boundary of the planning area. This means, for example, that a rural municipality must identify any watersheds and/or recharge areas for an adjacent town that fall within its planning area.

To identify the extent of the watershed or recharge area, the natural drainage area boundary is the key factor. This boundary forms the limit beyond which the water flows to another watershed or recharge area. This flow may be overland by way of streams, rivers & lakes and/or by seeping into and moving through the ground. ***Planning documents***, at a minimum, must identify the natural drainage area for the ***municipal water supply watersheds*** for surface water supplies and where information is available identify them for the recharge areas for the groundwater supplies (wells).

Some water supply areas have been "designated" as protected water areas (PWA) under the provisions of the *Environment Act*. A PWA boundary typically differs from that of the natural drainage area, since property lines are often used to define the PWA designation area. Refer to the provincial Registry of Regulations web site at www.gov.ns.ca/just/regulations for details on any municipal water supply watersheds in Nova Scotia that have been designated as Protected Water Areas under the Environment Act. (Search for "Protected Water Areas".)"

In a PWA, activities which could impair water quality such as logging, swimming, fishing and boating may be regulated or prohibited. This differs from regulation under a municipal planning strategy and land-use by-law which deals with the use and development of land, and focuses mainly on buildings and structures. Where applicable, ***planning documents*** should include the boundary of any PWA designated under the *Environment Act.*

Planning documents should also specify the location of the water supply intake, since lands closest to these intakes typically require the greatest level of protection. In the case of groundwater supplies, the water supply intake is the actual site of the well(s), sometimes referred to as the wellhead(s).

2)	***Planning documents*** must address the protection of drinking water in ***municipal water supply watersheds***.

Once the ***municipal water supply watersheds*** are identified, a municipality is required to deal with the matter of protecting the drinking water resource. To effectively do this, it is important to both understand conceptually what can pose a threat to water quality and know the specifics of the ***municipal water supply watershed*** covered by the ***planning documents***. With respect to the latter this includes the:

- type of ***municipal water supply watershed*** - either a watershed (surface water supply) or recharge area (groundwater supply);
- information about the natural and man-made environment in the ***municipal water supply watershed***, such things as the soil, topography, vegetation cover, property ownership, and extent & type of existing development.; and
- possible land uses and activities that could affect water quality [e.g. 'point sources' such as industrial facilities and 'non-point' sources such as lawn care chemicals) in the ***municipal water supply watershed***.

Planning documents should include background information on matters such as these, as a basis for informed decision making about the ***municipal water supply watershed***.

To protect the drinking water in the ***municipal water supply watershed*** the MGA provides municipalities with a number of tools. Most of these relate to ***planning documents***, although there are other powers. The specific development control tools used to protect the ***municipal water supply watershed***, be it zoning [S. 220], development agreements [S. 225-227], or site-plan controls [S. 231], is a municipal decision. The particulars of the watershed or recharge area (e.g. environmental conditions, size of watershed or recharge area, extent of development, development issues) will influence these decisions. This matter will be discussed in more detail later in this Guideline, under Section 3.

Where applicable, ***planning documents*** should address the matter of serviced land (e.g. water & sewer) within the watershed or recharge area, since it usually promotes development. Allowing new development on existing serviced lands is reasonable in most situations. However, permitting the expansion of serviced areas should be discouraged, since it usually promotes development.

Planning documents should not only recognize the impacts of individual uses but also the possible cumulative impacts of development in the watershed or recharge area. Overall though, minimizing the amount of new development in a ***municipal water supply watershed*** is one of the key ways to protect the municipal water supply.

Regardless of the approach used, ***planning documents*** must contain sufficient information and explanation to support it.

Here are five suggested measures that a municipality might use in its ***planning documents***.

Measures that should be considered include:

a) restricting permitted uses to those that do not pose a threat to drinking water quality;

Not all land uses pose the same threat to water quality. Even the same land uses can have different impacts depending on the specific design features and practices used. These practices apply both to how every day activities are carried out as well as to those during the construction phase of those land uses. These threats to drinking water can come from accidental events such as chemical spills (point source), or longer term cumulative impacts from things such as runoff from parking lots carrying automotive oils and road salt, or lawn care chemicals (non-point source). Hence, restricting uses to those that do not pose a threat to water quality is not always as straight forward as it may seem.

Contaminants that find their way into the water supply are the main concern. This can be in the form of chemical substances or microorganisms. They are things such as:

- organic compounds, such as petroleum products, solvents and pesticides;
- inorganic compounds, such as nitrogen and heavy metals; and
- disease bearing microorganisms, such as E. coli bacteria .

Groundwater supplies are particularly susceptible, because once contaminants get into the groundwater, it is extremely difficult to remove them.

Since ***planning documents*** cannot regulate the potential contaminants directly, it has to be done indirectly by controlling the land uses that may involve or produce them. Some examples of the types of uses which have a higher risk to contaminate drinking water are: dry cleaning establishments; outdoor storage facilities for fertilizers, pesticides or de-icing compounds; petrochemical industries and sanitary landfill/solid waste disposal sites.

b) balancing the expansion of existing uses against the risks posed to drinking water quality;

As with new uses, allowing expansion of existing uses has a lot to do with the use itself. For example, permitting an enlargement of a dwelling unit is one thing, but allowing the expansion of certain industries can be something entirely different. Again, as with new uses, the type of development control technique used might differ depending on the case in point. Basic zoning may be appropriate for a dwelling, but site-plan control or a development agreement may be more suitable for a commercial or industrial use.

c)	limiting the number of lots. Too many lots may result in development which cumulatively affects drinking water quality. The minimum size of lots and density of development should be balanced against the risk posed to the quality of drinking water;

The amount of development in an area can be influenced by the number of lots that exist. Fewer lots often means less pressure from landowners for new development. It also reduces the risk of the cumulative effects of development. Limiting the number of new lots created in a watershed or recharge area can assist with this. Under the MGA, municipalities, through their subdivision by-law, can limit the number of lots created by the subdivision of a parcel of land in a calendar year [S. 271(4)(c)]. This requires supporting policy in the municipality's MPS.

d)	setting out separation distances between new development and watercourses to provide protection from runoff;

Runoff can carry with it sediment, nutrients and contaminants (e.g. automotive oil). Establishing minimum setbacks or separation distances for developments means that runoff during and after construction is less likely to carry these undesirables to a watercourse. The MGA [S. 220(5)(o)] enables a municipality, where it has provided policy support in its MPS, to establish setbacks or separation distances from watercourses in its LUB. This separation distance provision is relevant to surface as well as groundwater supplies (wells), and the proximity of new development to the water supply intake is always a matter to consider.

The Department's Position Paper on *Separation Distances from Watercourses* (1992) suggests that a setback of 15 metres (50 feet) or less is acceptable in a broad range of cases. However, developments within a ***municipal water supply watershed*** may warrant greater separation distances. In watersheds where these larger setbacks may in effect act as a prohibition on development "such

interference with property rights is not justified without thorough and reasoned policy support".

e)	establishing measures to reduce erosion, sedimentation, runoff and vegetation removal associated with development.

In addition to limiting the amount and type of development, municipalities should also consider measures that will minimize land clearing and ground alteration. Land that is stripped of vegetation, cleared and graded is prone to erosion due to rain, snow melt and runoff. Municipalities can put in place measures to reduce the impact of development during and following construction. The MGA enables a municipality, where it is in connection with a development, to:

- regulate or prohibit the excavation or filling in of land and the placement of fill or the removal or soil [S. 220(5)(g)].
- prescribe measures to control erosion and sedimentation during construction [S. 220(5)(l)]; and
- regulate, or require the planting or retention of trees and vegetation for sedimentation or erosion control [S. 220(5)(d)].

This can be accomplished through standard zoning, a development agreement or site-plan control process. For example, site-plan control can deal with retention of existing vegetation [S. 231(4)(e)] and lot grading and storm and surface water matters [S. 231(4)(j)]. Site-plan control however cannot be applied to one and two unit dwellings.

3)	Existing land use and the location, size and soil conditions of a municipal water supply watershed will determine the land-use controls that should be applied. Large surface watersheds, for example, may be able to sustain more development than a small groundwater recharge area. It is recognized that in some situations the long-term protection of the drinking water supply may be impractical. In these cases planning documents must address the reasons why the water supply cannot be protected. Municipalities in this situation should consider locating an alternate source of drinking water where long-term protective measures

Each watershed or recharge area is unique in terms of its natural (e.g. soil type, vegetation cover, topography) and man-made environment (extent & type of existing development -

roads, buildings, uses). These factors influence the types and amounts of development that are appropriate in the particular ***municipal water supply watershed***. As well, the size of the watershed or recharge area is another element which should not be overlooked. There is no "one size fits all" when it comes to the development of regulations to protect drinking water and this is understandable in a province where the ***municipal water supply watershed*** can range in size from less than half a square kilometre (50 hectares) to almost 420 square kilometres (42,000 hectares).

The type of development control tool used - zoning, development agreement or site-plan control; the area within the watershed or recharge area to which they are applied and the specific uses permitted is a municipal decision. A municipality, for example, may adopt a uniform set of development controls across the whole watershed or recharge area. This may simplify the planning exercise, however it is not always practical. For example, in very large watersheds it may result in severe development restrictions over a large area. An alternative approach is to establish controls that relate the land use and its risk to the potential to harm water quality. Where this method is used, the distance from the water supply intake (in the case of recharge areas this is the wellhead) is often a key consideration, since water quality nearest the intake is of particular concern. Where the drinking water is from a groundwater source, this approach is commonly used since it is often difficult to exactly define the boundaries of the recharge area, and contamination from uses near the wellhead are a serious concern.

In some ***municipal water supply watersheds*** the existing amount of development may mean that traditional planning tools can no longer adequately address the safety of the drinking water supply. In such cases the best option may be for the municipality to seek out another source of drinking water. This then enables a municipality to do proper planning and establish development controls that offer a greater degree of protection for the water supply. Where ***planning documents*** do not provide protection for the ***municipal water supply watershed***, they must include reasons for not doing so.

4) The Province supports the preparation of watershed management strategies for all municipal water supply watersheds. These strategies should be prepared by the concerned municipalities and the municipal water utility, in consultation with all affected parties, including landowners.

Municipal ***planning documents*** are valuable tools for protecting ***municipal water supply watersheds***. However, they can only regulate in the area of land use and were not intended to address the broad range of matters associated with the protection of ***municipal water supply watersheds***. To deal with this, a watershed management strategy is required.

A ***municipal water supply watershed*** management strategy is a comprehensive document that addresses a wide range of matters relating to the management of a municipality's drinking water supply. These include matters not only of a land use nature, but also land acquisition, emergency preparedness, and water treatment. Typically, experts are hired to work with the municipality, its water utility and other stakeholders, such as landowners in the watershed or recharge area, to prepare the watershed management strategy. ***Planning documents*** are normally referenced in a watershed management strategy and form part of its overall implementation package.

In cases where the municipality owns the land in the watershed or recharge area, the MGA provides new by-law powers [S. 180]. In these cases a municipality may designate the land as a protected water supply area. (This is different than a PWA designated under the *Environment Act*.) In a protected water supply area the MGA prohibits certain prescribed activities, such as camping, swimming and fishing. The MGA also states that the *Angling Act*, which otherwise would permit fishing, does not apply in these areas. A by-law established under these provisions could also form part of the watershed management strategy.

Since a watershed management strategy deals with a broad range of water supply protection issues, they are strongly supported by the Province. Whether a municipality first prepares a watershed management strategy and then prepares or amends it municipal ***planning documents*** accordingly or the reverse, is a municipal decision. It will depend on the particular issues in the ***municipal water supply watershed***, as well as local priorities.

A good source of information on watershed management strategies is "Developing a Municipal Source Water Protection Plan (2004)". This document is available on the Nova Scotia Department of Environment and Labour website at: www.gov.ns.ca/enla/water/sourcewater.asp

DEFINITIONS

Groundwater Recharge Area - means the area of land from which water flows to supply a well.

Municipal Water Supply Watershed - means an area encompassing a surface watershed or recharge area, or a portion of it, serving as a water supply area for a municipal water system.

Planning Documents - means a municipal planning strategy, land-use by-law, development agreement and subdivision by-law.

Groundwater Recharge Area - means the area of land from which water flows to supply a well.

Municipal Water Supply Watershed - means an area encompassing a surface watershed or recharge area, or a portion of it, serving as a water supply area for a municipal water system.

Planning Documents - means a municipal planning strategy, land-use by-law, development agreement and subdivision by-law.

These are the definitions from the Statements of Provincial Interest (Schedule "B" of the MGA) package applicable to this Statement regarding Drinking Water.

Note: These Guidelines are available at the Service Nova Scotia and Municipal Relations website - www.gov.ns.ca/snsmr/muns/manuals/lgrh.asp

For clarification or additional information, contact:

Service Nova Scotia and Municipal Relations, Municipal Services Division
P.O. Box 216, Halifax, N.S., B3J-2M4 424-3872

or

go to the Nova Scotia Department of Environment and Labour Website at www.gov.ns.ca/enla/water/drinkingwater.asp . More information on the provincial drinking water program may be obtained by contacting the Water and Wastewater Branch using the "Contact us" link on the webpage.

-Guideline 2 -

Flood Risk

GOAL:

- To protect public safety and property and to reduce the requirement for flood control works and flood damage restoration in floodplains.

BASIS:

- Floodplains are nature's storage area for flood waters.
- New development in a floodplain can increase flood levels and flows thereby increasing the threat to existing upstream and downstream development.
- Five floodplains have been identified as Flood Risk Areas under the Canada-Nova Scotia Flood Damage Reduction Program.

APPLICATION OF THE STATEMENT

This statement applies to all Flood Risk Areas that are designated under the Canada-Nova Scotia Flood Damage Reduction Program. These are:

(1) East River, Pictou County,

(2) Little Sackville River, Halifax County,

(3) Sackville River, Halifax County,

(4) Salmon and North Rivers, Colchester County, and

(5) West and Rights Rivers and Brierly Brook, Antigonish County.

In Nova Scotia there are five rivers which were designated and mapped under the Canada - Nova Scotia Flood Damage Reduction Program (FDRP) [1980s]. These rivers are considered to be the most significant in the province in terms of their flood risk as it relates to the amount of existing development and the likelihood

for flooding. Hence, they have a high potential for flood damage. An important condition in the federal-provincial FDRP agreement was that any new development in a designated flood risk area was not eligible for government flood damage assistance. An integral part of this program was the mapping of the flood risk areas on these five rivers. The rivers are identified on the attached Flood Risk Implementation Guidelines Map.

There are other areas in the Province that are subject to flooding which have not been mapped under the Canada-Nova Scotia Flood Damage Reduction Program. In these areas, the limits of potential flooding have not been scientifically determined. However, where local knowledge or information concerning these floodplains is available, ***planning documents*** should reflect this information and this statement.

Numerous other areas in the province are known to be subject to flooding. Documentation of flooding events in these areas varies in type and extent. It may take the form of historical records such as narrative descriptions, photographs, and recorded flood marks on buildings or structures. Where such documentation is available, a municipality should attempt to develop models or scenarios regarding the flooding. For example historical documentation, such as photos and recorded flood levels could be used to develop elevation maps to help define flood areas. Municipalities are also encouraged to undertake scientific studies to more precisely document flood risk in areas not covered by the FDRP mapping.

Where a municipality identifies in its ***planning documents*** locally known ***floodplains*** (non-FDRP flood risk areas), and establishes land use controls for these areas, care should be taken to ensure that these controls can be justified. The rationale for these land use controls should be set out in policy in the ***planning documents***.

PROVISIONS OF THE STATEMENT

1) ***Planning documents*** must identify Flood Risk Areas consistent with the Canada-Nova Scotia Flood Damage Reduction Program mapping and any locally known ***floodplain***.

The first step for a municipality is to identify any FDRP mapped flood risk areas and/or locally known ***floodplains*** within the planning area. These two types of flood risk areas should be dealt with separately. There are two reasons for this. FDRP areas are based on scientific/technical study and the other areas are typically based on historical information. As well, in FDRP flood risk areas, the federal-provincial agreement specified that there would be no government assistance for flood damage for new developments. These areas should be identified on zoning maps. In the case of FDRP mapped areas, zoning and other maps should identify the area in terms of both the ***floodway*** and ***floodway fringe***.

2) For Flood Risk Areas that have been mapped under the Canada-Nova Scotia Flood Damage Reduction Program ***planning documents*** must be reasonably consistent with the following:

a) within the ***Floodway***,

(i) development must be restricted to uses such as roads, open space uses, utility and service corridors, parking lots and temporary uses, and

This provision only applies to the flood risk areas for the five rivers that were designated under the FDRP. Under the FDRP each flood risk area was divided into two areas: ***floodway*** and ***floodway fringe.*** The ***floodway*** is the area where flooding is most likely to occur (on average flooded once in 20 years or 5% chance of being flooded in any given year). Also in these areas the floodwaters are deepest and flow fastest and so the potential of flood damage is greatest. To reflect this potential for damage, more stringent restrictions should be placed on development in the ***floodway***. This means, for example, prohibiting permanent structures in these areas in order to allow flood waters to flow freely. The types of uses that can be permitted include:

- recreation and open space uses, such as athletic fields, golf courses and parks;
- cropland and,
- utility/service corridors, since often much of the development is underground.

Temporary uses are acceptable, although typically subject to certain criteria, such as:

- the type of use (i.e. easily moved in case of a flood - e.g. mobile canteen, flea market);
- the seasonal nature of the use (i.e. permitted when the potential for flooding is lowest): and
- the overall impact of the use in the event of a flood.

(ii) the placement of off-site fill must be prohibited;

Placing fill in a flood risk area can alter the flow patterns and rates of flood waters as well as the storage capacity of the ***floodplain*** itself. Adding new fill reduces the storage capacity and increases the likelihood that lands previously not subject to flooding will be flooded. Hence, a municipality's ***planning documents*** must prohibit the placing of ***off-site fill*** in the ***floodway***. In other words there must be no net gain of fill within the ***floodway***.

(b) within the ***Floodway Fringe***,
  (i) development, provided it is flood proofed, may be permitted, except for
    (1) residential institutions such as hospitals, senior citizen homes, homes for special care and similar facilities where flooding could pose a significant threat to the safety of residents if evacuation became necessary, and

Flooding is less likely to occur in the ***floodway fringe*** than in the ***floodway***. As well, when floods occur the depth and speed of the floodwaters is also less. Consequently, buildings and structures for certain uses can be permitted, provided they are built in a way that minimizes the impact of any floodwaters on them. There are two ways buildings or structures can be built to minimize this impact:

- Dry Proofing: this means raising the elevation of the ground around the building or structure itself so floodwaters are diverted around it. In essence, the building or structure becomes an island of higher ground around which flood waters flow.
- Wet Proofing: this means raising the building or structure, so that it is in essence on stilts, so that the water flows underneath or through it (eg. parking garage at ground level).

Ice floes are often associated with flooding in Nova Scotia and so the design of such structures should take this into account.

Some uses such as hospitals and nursing homes should not be permitted in the ***floodway fringe***, since it is essential that people and goods (e.g. ambulances) be able to move freely to and from them at all times.

(2) any use associated with the warehousing or the production of ***hazardous materials***,

Concern about the possible damage or destruction of buildings and property is one of the reasons for this statement. In this context allowing ***hazardous materials*** to be stored or produced in a ***floodway fringe*** could pose a real health and environmental risk if they got into the water. Consequently, uses associated with these materials must be prohibited in the ***floodway fringe***. These include uses such as petrochemical storage facilities.

(ii) the placement of off-site fill must be limited to that required for flood proofing or flood risk management.

Since flood waters are likely to be less deep in the ***floodway fringe*** and the flows slower, the placement of ***off-site fill*** is less of an issue. Still ***off-site fill*** must be restricted. A reasonable restriction is to limit its use to that which is necessary for a building to be ***floodpoofed*** by raising the elevation of the ground around the outside of a building. It can also be used for dyke construction for purposes of flood control and to improve or smooth the flow of flood waters.

3) Expansion of existing uses must be balanced against risks to human safety, property and increased upstream and downstream flooding. Any expansion in the ***Floodway*** must not increase the area of the structure at or below the required flood proof elevation.

This applies to FDRP mapped areas, but it is suggested that it also be applied to other locally known ***floodplains***. The objective of this requirement is to restrict expansions of existing uses in the ***floodway*** so that the ***floodplain*** storage capacity and flood water flows are not changed. This can be achieved by limiting building and structure

expansions to those that extend upwards rather than out. Such expansions might be allowed only by development agreement or site plan control since these types of development control tools provide greater control of the details of an expansion.

4) For known ***floodplains*** that have not been mapped under the Canada-Nova Scotia Flood Damage Reduction Program, ***planning documents*** should be, at a minimum, reasonably consistent with the provisions applicable to the ***Floodway Fringe***.

This pertains to flood risk areas that have not been designated and mapped under the FDRP. Flood risk information for these areas is typically less detailed and so it is more difficult to justify stringent development controls. Still, at a minimum the requirements of a ***flood fringe*** area should be used for these flood risk areas. Refer to Section 2(b) of this Guideline for guidance. However, this does not preclude a municipality from establishing more stringent requirements where more detailed information and/or local conditions warrant it.

5) Development contrary to this statement may be permitted provided a hydrotechnical study, carried out by a qualified person, shows that the proposed development will not contribute to upstream or downstream flooding or result in a change to flood water flow patterns.

This applies to both FDRP mapped areas and other flood risk areas. It enables a municipality to permit developments which are otherwise contrary to this Statement through the use of a hydrotechnical study. Such a study would be required to demonstrate that a proposed development will not increase flooding or change flood flow patterns. A hydrotechnical study is a specialized scientific investigation of water flows and flood contributing factors (e.g. tides, ice) .

Municipalities with flood risk areas mapped under the FDRP should not assume that the approved FDRP mapping or the conditions that apply under that program to those lands will change as a result of the hydrotechnical study.

DEFINITIONS

Floodplain-	means the low lying area adjoining a watercourse.
Floodproofed-	means a measure or combination of structural and non-structural measures incorporated into the design of a structure which reduces or eliminates the risk of flood damage, usually to a defined elevation.
Floodway-	means the inner portion of a flood risk area where the risk of flooding is greatest, on average once in twenty years, and where flood depths and velocities are greatest.
Floodway Fringe-	means the outer portion of a flood risk area, between the floodway and the outer boundary of the flood risk area, where the risk of flooding is lower, on average once in one hundred years, and floodwaters are shallower and slower flowing.
Hazardous Materials-	means dangerous goods, waste dangerous goods and pesticides as defined in the Environment Act C.1, S.N.S. 1994-95.
Off-site Fill-	means fill that has been imported from outside the floodplain or fill which is transported from the Floodway Fringe to the Floodway.
Planning Documents -	means a municipal planning strategy, land-use by-law, development agreement and subdivision by-law.

These are the definitions from the Statements of Provincial Interest (Schedule "B" of the MGA) package applicable to this Statement regarding Flood Risk.

Note: these Guidelines and applicable mapping as well as other information are available at the Service Nova Scotia and Municipal Relations Website - **www.gov.ns.ca/snsmr**

For clarification or additional information, contact:

Service Nova Scotia and Municipal Relations
Municipal Services Division
P.O. Box 216, Halifax, N.S., B3J 2M4
424-3872

or

Nova Scotia Department of Environment
Resource Management and Environmental Protection Branch
Ecosystem and Risk Management Branch
P.O. Box 2107, Halifax, N.S., B3J 3B7
424-2555

-Guideline 3 -

Agricultural Land

GOAL:

- To protect ***agricultural land*** for the development of a viable and sustainable agriculture and food industry.

BASIS:

- The preservation of ***agricultural land*** in important to the future of Nova Scotians.
- ***Agricultural land*** is being lost to non-agricultural development.
- There are land-use conflicts between agricultural and non-***agricultural land uses.***

APPLICATION OF THE STATEMENT

This statement applies to all active ***agricultural land*** and land with agricultural potential in the Province.

The focus of this statement is on lands which are currently being used for agriculture or which because of the soil characteristics have potential for agricultural production. The term ***agricultural land,*** is defined in the Municipal Government Act's Schedule "B" - Statements package and for reference purposes the definition appears at the end of this Guideline. It clarifies that agricultural potential means land defined by the Canada Land Inventory as Class 2, 3 or 4 and situated in active agricultural areas. It also points out that ***agricultural land*** also means specialty crop lands and dykelands, as identified by the Department of Agriculture and Fisheries.

PROVISIONS OF THE STATEMENT

The Statement sets out three provisions:

Land suitable for agriculture is limited in Nova Scotia and so it is important to recognize and protect it.

Planning documents must identify lands which meet the ***agricultural land*** definition. This includes:

- lands presently in active agriculture and land with agricultural potential;
- lands on which specialty crops such as blueberry, cranberry and grapes are cultivated; and
- dykelands which are suitable for commercial agricultural purposes.

Specialty crops have been singled out because they often have specific growing requirements and/or specific infrastructure investments which are important to recognize. Dykelands are also noted because they represent some of the most fertile land in the province and the dykes which sustain these areas are maintained at public expense. The Nova Scotia Department of Agriculture and Fisheries should be contacted to ensure that all dykeland areas have been identified.

Planning documents also should distinguish between active lands and those that have agricultural potential. This provides a better picture of the agricultural industry in the planning area and can help in decision making regarding land use and development. Where possible, active ***agricultural land*** which has undergone land improvements, such as ditching and tile drainage should be identified, since these typically represent public investments. A good initial source of agricultural land use information is the Agriculture Land Information Program (ALIP) maps (1998). These are available from the Resource Stewardship Branch, Nova Scotia Department of Agriculture and Fisheries. A reference map showing this information, entitled Agricultural Land - Implementation Guidelines, is attached.

2) ***Planning documents*** must address the protection of ***agricultural land***. Measures that should be considered include:

Clearly ***planning documents*** are expected to protect ***agricultural land***. The Statement sets out ways (listed below) by which these lands may be protected in ***planning documents.*** Where ***agricultural land*** is not protected in ***planning documents***, municipalities must identify the area and state why these lands cannot be protected.

(a) giving priority to uses such as agricultural, agricultural related and uses which do not eliminate the possibility of using the land for agricultural purposes in the future. Non-agricultural uses should be balanced against the need to preserve ***agricultural land***;

The first priority for ***agricultural land*** should be to agricultural uses. This includes (but is certainly not limited to) farms that carry out one or more of the wide range of uses which are clearly agricultural, such as:

- field vegetables (e.g. carrots, corn, cabbage),
- fruit trees,
- grapes and other vine fruits, berries, and
- pasture.

As well, agricultural uses include the buildings such as livestock structures, grain and equipment storage, manure storage and residences directly related to the farm operation. Agricultural industries which do food processing can also be considered agricultural related.

Non-agricultural uses such as renewable resource uses (e.g. forestry and passive recreational uses) may also be permitted, since they do not eliminate the possibility of using the land for agricultural purposes in the future. These permitted non-agricultural uses should be ones which do not negatively affect the ***agricultural land*** base itself (i.e. do not remove the good soil or otherwise alter the landscape) and/or which require financial investment for such things as, but not limited to, infrastructure (roads, water/sewer, buildings) which make it impractical to convert the land to agriculture.

It is recognized that not all ***agricultural land*** can be protected. There are situations where growth and development must be accommodated. A couple of examples are where growth centres (e.g.hamlets) are identified to concentrate development in one area rather than have it scattered throughout an agricultural area. Another example, is where there are existing centralized services (e.g water, sewer) or where an area is designated for such services in the future.

(b) limiting the number of lots. Too many lots may encourage non-agricultural development. The minimum size of lots and density of development should be balanced against the need to preserve ***agricultural land***;

The extent to which development occurs in an area can also be influenced by the number of lots that exist. Where fewer lots exist, this often means less pressure from landowners for development. Limiting the number of new lots created in a agricultural area can help lessen this pressure. It can also reduce the amount of scattered development and assist in retaining larger property sizes which can be important for today's larger mechanical agricultural equipment. Under the MGA, municipalities, through their subdivision by-law, can limit the number of lots created by the subdivision of a parcel of land in a calendar year [S. 271(4)(c)]. This requires supporting policy in the municipal planning strategy (MPS).

> (c) setting out separation distances between agricultural and new non-agricultural development to reduce land-use conflicts;

Farm land is often the site of activities which may cause odour, dust, and noise. These activities are often carried out at all hours of the day. They may conflict with adjacent land uses, particularly residential and urban-related uses. Therefore, consideration should be given to establishing separation distances between agricultural uses and non-agricultural uses, such as housing, in the ***planning documents***.

Since farms and their impacts vary considerably, there are no hard and fast rules for separation distances. Still there are some sources of information which may be of assistance. For example the Department of Agriculture and Fisheries has prepared "Guidelines for the Siting and Management of Hog Farms in Nova Scotia". That document, in addition to setting recommended separation distances for farms, also suggests that municipalities apply these separation distances in a reciprocal fashion to other land uses. For example, this means establishing a separation distance for a new hog barn from existing residential uses and a similar one for new residential uses from existing hog barns.

> (d) measures to reduce topsoil removal on lands with the highest agricultural value.

Good soil is essential for most agriculture. Removing the topsoil can change once highly valued agricultural soil into virtually useless farm land. The MGA provides municipalities with the power under Section 220 (5)(h) to "regulate or prohibit the removal of topsoil" by way of the LUB, where there is supporting policy in the MPS. This is a new power.

3) Existing land-use patterns, economic conditions and the location and size of agricultural holdings means not all areas can be protected for food production, e.g., when ***agricultural land*** is located within an urban area. In these cases, ***planning documents*** must address the reasons why agriculture lands cannot be protected for agricultural use. Where possible, non-agricultural development should be directed to the lands with the lowest agricultural value.

It is not always possible, nor ultimately in the best public interest, to protect all lands capable of agricultural production. Development and growth especially in urban centres is often inevitable. For example, in areas adjacent to urban centres ***agricultural lands*** over time may become surrounded or interspersed with non-agricultural uses. Also, in some cases urban services such as centralized water and sewer may have even been extended into these areas. In such cases making efficient and effective use of the services may be more appropriate than protecting the land for agriculture.

Providing for non-agricultural growth (e.g. residential, commercial and industrial uses) is an important objective of ***planning documents***. Encouraging infilling and allowing higher densities of development in existing built up areas is one way of protecting adjacent ***agricultural land***. Another is to direct growth to lands with the lowest potential for agriculture.

DEFINITIONS

Agricultural Land - means active farmland and land with agricultural potential as defined by the Canada Land Inventory as Class 2, 3 and Class 4 land in active agricultural areas, speciality crop lands and dykelands suitable for commercial agricultural operations as identified by the Department of Agriculture and Marketing.

Planning Documents - means a municipal planning strategy, land-use by-law, development agreement and subdivision by-law.

These are the definitions from the Statements of Provincial Interest package (Schedule B of the MGA) applicable to this Implementation Guideline regarding Agricultural Land. The Department of Agriculture and Marketing referred to in the definitions is now known as the Department of Agriculture and Fisheries.

Note: these Guidelines and associated mapping as well as other relevant information are available at the Service Nova Scotia and Municipal Relations Website - **www.gov.ns.ca/snsmr**

For clarification or additional information, contact :

Service Nova Scotia and Municipal Relations, Municipal Services Division
P.O. Box 216 Halifax, NS, B3J 2M4 424-3872

or

Nova Scotia Department of Agriculture and Fisheries, Resource Stewardship Branch
P.O. Box 550 Truro, NS, B2N 5E3 893-6575

-Guideline 4 -

Infrastructure

GOAL:

- To make efficient use of municipal water supply and municipal wastewater disposal systems.

BASIS:

- All levels of government have made significant investment in providing municipal water supply and municipal wastewater disposal infrastructure systems.
- Unplanned and uncoordinated development increases the demand for costly conventional infrastructure.

APPLICATION OF THE STATEMENT

All communities of the Province.

This Statement applies to all areas of a municipality. The primary focus is on communities served by or intended to be served by municipal water and/or municipal wastewater disposal systems (municipal infrastructure). However, it also applies to areas outside these communities since the type and amount of development in unserviced areas can affect the demand for development in communities served by municipal infrastructure.

PROVISIONS OF THE STATEMENT

The Statement sets out four provisions.

1) ***Planning documents*** must promote the efficient use of existing infrastructure and reduce the need for new municipal infrastructure.

A municipality's ***planning documents*** shall include provisions which address their existing municipal water supply and wastewater disposal systems. These provisions must:

- encourage development which makes greater use of current systems; and
- discourage development which increases the demand for new municipal infrastructure.

A basic inventory of existing infrastructure, such as:

- areas served by the municipal infrastructure, and
- location and size of pipes

is an important first step and one that has been taken by many municipalities. However, what sometimes requires more detail are matters, such as (but is not limited to):

- detailed information on the current demand on the municipal infrastructure,
- excess capacity of the infrastructure (e.g. pipes, pumping stations, treatment facilities) or any deficiencies, and
- service area boundaries (the boundary separating the area which is or will be served by municipal infrastructure from that which will not).

Factors specific to the municipality, such as, the size of the planning area, the level of development pressure, and the type and extent of water and wastewater issues, will affect the comprehensiveness of the information required. Once this inventory is assembled, an infrastructure strategy might be prepared to address infrastructure issues. This strategy could be basic or detailed depending on the needs and resources of the municipality and the issues to be addressed. The infrastructure inventory and strategy could form an integral part of the municipal planning strategy (MPS), for example in an appendix, or exist as separate documents referred to in the MPS.

Besides ***planning documents***, the *Municipal Government Act* (MGA) provides other tools, such as wastewater by-law powers [MGA - Part 14 - Sewers] and area tax rates [MGA - Part 4 - Finance] that a municipality might use in conjunction with planning to meet the goal of this Statement. However, a MPS is a key tool to provide the overall framework for dealing with this issue in a comprehensive way.

Considering a review of municipal engineering specifications can be an important part of complying with this Statement. Existing municipal engineering specifications may be outdated or excessive and so may conflict with other initiatives to make efficient use of municipal infrastructure.

Planning documents must provide sufficient information and explanation to support it.

Here are five suggested measures that a municipality might use in its ***planning documents*** and other tools available to municipalities.

Measures that should be considered include:

(a) encouraging maximum use of existing infrastructure by enabling infill development on vacant land and higher density development;

Municipal water supply and wastewater disposal systems are costly to install and maintain. New developments which make use of existing systems are usually more cost effective than developments that require new systems. For example, this is because the increased revenues from sewer charges and/or water rates for the new development typically do not have the increased operating and maintenance costs associated with adding new infrastructure.

A municipality, in its ***planning documents***, can include a number of provisions that encourage maximum use of existing municipal infrastructure. These include, [the enabling section of the MGA for the land-use by-law (LUB) provisions are noted below]:

- existing undersized lots - allow for the development of existing lots which do not meet the regular minimum lot size requirements of a zone(s) [S. 220(4)(a)& (f)];
- lot size and frontage - where vacant land in a serviced area is not being developed, reduce the lot size and frontage requirements to promote the development of the land [S. 220(4)(a)& (f)];
- dwelling conversion - allow conversion of existing dwellings to permit additional unit(s); for example, the conversion of a single unit dwelling to permit a basement apartment [S. 220(2)(a)], and if desired, include requirements to address possible concerns, such as,
    - limit the maximum size of a new converted use [S. 220(4)(b)],
    - regulate off-street parking [S. 220(4)(h)],
    - require fences [S. 220(5)(c)](requires policy in MPS),
    - require landscaping and buffering [S. 220(5)(e)](requires policy in MPS), and
    - regulate the external appearance of structures [S. 220(5)(i) (requires policy in MPS);
- dwelling unit density - permit increased density of residential dwelling units [S. 220(2)(a)&(4)(g)], for example, by permitting some multiple unit residential in low density residential areas. There are three main approaches to do this (all of which require policy support in the MPS):
    - development agreement [S. 225 & 227],
    - rezoning [S. 219(2)], or
    - site plan approval [S. 231-233].

  Of these, site plan approval is a new power under the MGA. Unlike a rezoning or development agreement, it allows the actual development "as of right" and it does not require a public hearing process. Still, it allows for regulation of some of the details of a development [S. 231(4)](requires policy support in MPS), such as: driveways, vegetation, buffering of adjacent uses, solid waste storage and signage; and

- height restrictions - increase the height limit for buildings [S. 220(4)(d)] so that they can be taller (sometimes done in conjunction with increasing dwelling density - see above).

(b) discouraging development from leapfrogging over areas served by municipal infrastructure to unserviced areas;

Determining where growth should take place is a key part of land-use planning. Through a MPS and LUB a municipality can identify:

- areas currently served by municipal infrastructure,
- areas to be serviced in the future, and
- areas which will remain without municipal infrastructure.

This information can be used to direct development accordingly. The municipality can establish land-use controls (e.g. type of use, lot size) compatible with the type of servicing, either municipal or on-site. Within the servicing area boundary, lot sizes would typically be smaller and the development higher in density. Where the intention is to limit development in unserviced areas, a map should be part of the MPS showing this service area boundary and include policies in the MPS addressing this issue [MGA S. 214(1)(h),(i)&(l)]. Where there is policy support, a LUB could, for example, prohibit development where the cost of providing the municipal infrastructure would be prohibitive or premature [MGA S. 220(5)(n)], and/or set very large lot size and frontage requirements in the unserviced area in order to limit new development [MGA S. 220(4)(a)]

Regulating the number of lots available for development in areas not served by municipal infrastructure is another way to discourage development from these areas. Where there is policy in the MPS, a subdivision by-law can limit "the number of lots that may be created from an area of land in a calendar year". [MGA S. 271(4)(c)].

(c) directing community growth that will require the extension of infrastructure to areas where servicing costs will be minimized. The use of practical alternatives to conventional wastewater disposal systems should be considered;

With the costs of municipal infrastructure escalating, directing growth to areas within the municipality which are less costly to service is logical. This does not mean minimizing cost by

directing growth so that new development is served by on-site rather than municipal infrastructure. (Although this is appropriate in some situations). Instead, there should be recognition of the differences in the cost of servicing due to factors such as, pipe installation costs (e.g. bedrock), the need for pumping stations (i.e. topography), the distance from a treatment plant, and general community form considerations, and direct growth to minimize these costs. Besides capital costs, ongoing operating costs may also be an issue to consider. An infrastructure servicing strategy (refer to section 1 of this Guideline) would likely address servicing costs.

A municipality through its ***planning documents*** can direct growth to areas where the costs are lower, by using the powers referred to in Section 1(b) of this Guideline.

Conventional municipal wastewater disposal systems involve the collection of sewage from individual households and piping it to a centralized sewage treatment facility. When building municipal facilities or when regulating private developments, such as new residential subdivision, consider should be given to alternatives to conventional treatment plants. A MPS for example, could include policy stating that investigation of the feasibility of alternative wastewater disposal systems will form part of a municipal infrastructure strategy. As well, the MPS could indicate that the municipality would promote the use of alternative wastewater disposal systems in new developments and provide subdivision and development controls which enable this (see Section 2 of this Guideline for more details).

(d) identifying known environmental and health problems related to inadequate infrastructure and setting out short and long-term policies to address the problems including how they will be financed.

Environmental or health issues related to municipal infrastructure are critical concerns. They can deter development and be a significant municipal liability, both financial and otherwise. Any problems with the municipal infrastructure, such as inadequate water or sewage treatment, would likely be identified in any inventory or study of these systems (referred to in Section 1 of this Guideline).

A MPS can identify major shortcomings (e.g. capacity) of municipal infrastructure, and include policies to address these problems. For example, it could include policies relating to a capital works program and/or financial plan. This capital works program and financial plan could be part of a municipal infrastructure strategy that is either cited in, or forms an integral part of, the MPS. Not only would this infrastructure strategy and capital works program be useful for dealing with existing problems, but also useful for determining where additional development can occur and to what extent.

In order to adequately address current problems, it is important that new development does not further strain the existing municipal infrastructure, either financially or physically. There are two powers under the MGA which can assist in this regard. Both of these pertain to the provision of municipal infrastructure in relation to the subdivision of land under a subdivision by-law. These MGA powers enable a municipality to adopt a subdivision by-law that:

- requires the subdivider to install municipal infrastructure in new streets [MGA S. 271(5)]; and
- institute infrastructure charges [MGA S. 274-276], which enables the municipality to levy charges on the subdivider to pay for necessary upgrades to infrastructure in existing streets and oversizing in new streets. (For more information on infrastructure charges, refer to MGA Information Bulletin #26 - Infrastructure Charges and Best Practice Guide)

2) Where on-site disposal systems are experiencing problems, alternatives to the provision of conventional wastewater disposal systems should be considered. These include the replacement or repair of malfunctioning on-site systems, the use of cluster systems and establishing wastewater management districts.

In areas where on-site sewage disposal systems (i.e. septic tank and disposal field) are not functioning properly, property owners often look to governments for assistance. Sometimes these malfunctioning systems are merely an isolated incident. More often, because of development patterns (e.g. small properties) and soil conditions, they are a problem common to certain areas.

Installing conventional municipal wastewater disposal systems can be costly and so alternatives should be considered. Some of these alternatives can be addressed outside of the scope of ***planning documents***. However, dealing with on-site disposal system problems in a comprehensive way under a municipal planning strategy may be the most effective approach.

In order to address current concerns and head off future ones, municipalities are encouraged to identify (in consultation with regional offices of the Nova Scotia Department of Environment and Labour) areas of existing and potential on-site sewage disposal system troubles. These sites can be either identified directly in the MPS or reference made in the MPS to the appropriate document(s). The MPS could then include policies to deal with these problems. For example, the MPS and the accompanying land-use by-law (LUB) could establish a comprehensive development district (CDD) [MGA S. 226] in areas with on-site sewage disposal problems. Under a CDD, development is approved by way of a development agreement [MGA S. 225 & 227] . Through the development agreement process, details concerning the development, such as: the subdivision of the land [S. 227(1)(g)], the construction of water and wastewater system [S. 227(1)(f)] and easements for those systems [S. 227(1)(d)] can be addressed. These are in addition to matters that can be regulated through conventional zoning [MGA S.220(4)&(5)].

A municipality has other tools available to it under the MGA to complement what is done through ***planning documents***. Here are a couple of examples:

- Establish a wastewater management district (WWMD) [MGA S. 342]. A WWMD is established by by-law. To date, in Nova Scotia, WWMDs have been created to address existing on-site sewage disposal problems. However, since the process for establishing a WWMD has been simplified under the MGA, it can be used for new developments as well. For example, a WWMD could be established for an area covered by a CDD (Comprehensive Development District). In a WWMD by-law, a municipal council can:
    - set the boundaries of the district,
    - determine the type of wastewater system(s) to be used in the WWMD (to date, so called cluster or communal on-site systems have been most commonly used),
    - specify the extent to which the municipality is responsible for these systems, and
    - establish charges for property owners served by the system.
- Adopt an on-site sewage disposal standards by-law [MGA S. 336]. Under this by-law a municipality may require owners of private on-site sewage disposal systems, for example individual homeowners, to maintain their systems. This by-law can include requirements to have a system: checked, pumped, cleaned, and maintained in accordance with the standard.

3)	Installing municipal water systems without municipal wastewater disposal systems should be discouraged.

Experience shows that in areas which are served by one municipal service, there is frequently a demand for the other service later. This is often the case where a municipal water system is the original system. With a municipal system water consumption is typically greater as there is no concern about the "well going dry". This has the potential to overtax an on-site sewage disposal system and cause it to function improperly and perhaps pollute. Installing a municipal wastewater disposal system to correct this type of problem is typically more expensive than if it was done at the same time as the municipal water system. Not only that, but since lot sizes are typically larger to accommodate the on-site sewage disposal systems, the amount of sewer pipe required is greater and again increases the overall cost.

Hence, in areas where municipal infrastructure is an issue, ***planning document*****s** should include provisions that encourage or require installation of both services at the same time. This would mean policy support in the municipal planning strategy, and could include such things as: smaller lot sizes in the land-use by-law [MGA S. 220(4)(a)] which are more in keeping with areas that have both municipal water and wastewater disposal systems; and requirements in a municipal subdivision by-law [MGA - S. 271(3)(g)] that require new subdivisions to include both types of municipal infrastructure.

4) Intermunicipal solutions to address problems and provide infrastructure should be considered.

Often, development does not stop at a municipal boundary. This is routinely the case with towns and their neighbouring county or district municipalities. This can have an impact on existing municipal water supplies and wastewater disposal systems, as well as present opportunities and challenges for future systems.

Municipalities are encouraged to cooperate with their neighbouring municipalities when there are issues of development and municipal water and wastewater servicing that cross municipal boundaries.

Under the MGA there are two powers that specifically relate to intermunicipal cooperation:

- Intermunicipal service agreement [MGA S. 60] - enables a town, for example, to enter into an agreement with its neighbouring county or district municipality to extend its municipal sewer and/or water lines into the county or district municipality to service nearby properties. This agreement could also deal with other aspects of the municipal water supply or wastewater disposal systems such as water or sewage treatment plants. Expanding these plants to deal with these additional uses in an adjacent municipality might improve the economies of scale and hence the cost per property served.

- Intermunicipal planning strategy [MGA S. 215] - enables the councils of two or more municipalities to adopt an intermunicipal planning strategy to address matters of mutual interest. An intermunicipal planning strategy can deal with the same matters as a conventional municipal planning strategy, including the use and development of land, the staging of development and the provision of municipal infrastructure [MGA S. 214(1)]. Refer to Section 1 of this Guideline for suggestions regarding the types of measures that should be considered in a municipal planning strategy.

DEFINITIONS

Planning Documents - means a municipal planning strategy, land-use by-law, development agreement and subdivision by-law.

These are the definitions from the Statements of Provincial Interest package (Schedule "B" of the MGA) applicable to this Statement regarding Infrastructure.

Note: these Guidelines as well as other relevant information are available at the Service Nova Scotia and Municipal Relations Website - **www.gov.ns.ca/snsmr**

For clarification or additional information, contact :

Service Nova Scotia and Municipal Relations,
Municipal Services Division,
P.O. Box 216 Halifax, NS, B3J 2M4 424-3872

or

Nova Scotia Department of the Environment and Labour,
Environmental and Natural Areas Management Division,
P.O. Box 697, Halifax, N.S. B3J-2T8 424-5300

- Guideline 5 -

Housing

GOAL:

- To provide housing opportunities to meet the needs of all Nova Scotians.

BASIS:

- Adequate shelter is a fundamental requirement for all Nova Scotians.

APPLICATION OF THE STATEMENT

All communities in Nova Scotia.

This Statement applies to all communities of every municipality in the province.

PROVISIONS OF THE STATEMENT

This Statement sets out four provisions.

1. ***Planning documents*** must include housing policies addressing affordable housing, special-needs housing and rental accommodation. This includes assessing the need and supply of these housing types and developing solutions appropriate to the planning area. The definition of the terms affordable housing, special-needs housing and rental housing is left to the individual municipality to define in the context of its individual situation.

Housing is a basic component of every community and planning for it is a key if not essential part of most planning exercises. In order to appropriately and fully address housing issues in ***planning documents*** it is important to first know the current local housing situation and then make some projection on future demand. Gathering information about existing housing can range from a very basic exercise, which may include things such as compiling elementary housing data and collecting information from the real estate community, to an elaborate undertaking that involves external consultants and numerous reports. The size and complexity of your community is often a key factor in determining what is necessary and appropriate.

To illustrate the type of exercise that a municipality might undertake, the Region of Queens Municipality and Service Nova Scotia & Municipal Relations, jointly sponsored a report entitled **"Housing Supply/Demand Market Study To Identify Housing Needs in the Liverpool Area"**. A generic version of this report appears as Appendix "A" to this Guideline. This document may serve as a useful guide for some municipalities.

Once the housing need and supply research is completed this information can then be used to guide housing policies in the municipal planning strategy (MPS). Although policies in the MPS are not restricted to matters of land use, these are most typical. Where a municipality intends to include broader housing policies it is suggested that the municipality consult the Nova Scotia Department of Community Services (www.gov.ns.ca/coms/housing/) which is the primary agency responsible for housing in the province.

Policies of particular relevance to this Statement relate to matters which are not always of great interest to the market place, namely rental housing, affordable housing and special-needs housing. Since every community is different, this Statement does not set rigid definitions for these terms. This is up to the municipality. Of these, defining affordable housing is likely the most challenging, since it can vary widely from community to community. The size and growth rate of the community as well as the age and condition of existing housing stock and mix of housing tenure can greatly affect this. Still, a commonly accepted benchmark for housing to be affordable is that it should not exceed 30% of a household's gross income. Regarding special-needs housing, this typically refers to housing in which the residents require some form of support services. Hence, it is sometimes called supportive housing. Examples include housing for the physically or developmentally challenged.

Where ***planning documents*** are being developed for an entire municipality or a major portion of it, they are expected to address these matters or provide reasons why this is not possible. When a municipality is preparing a plan for only a portion of its jurisdiction or undertaking a localized amendment this may not always be necessary. However, over time a municipality should prepare ***planning documents*** which address the matters identified in this Statement and provide the context for localized amendments.

An underlying objective of this Statement is that municipalities plan for and enable a full range of housing types so that people can live out their full life cycle in the community. Where a municipality intends to become more actively involved in housing solutions there are additional powers available under the Municipal Government Act (MGA). For example, a municipality may acquire and assemble land to carrying out a development consistent with the MPS, regardless whether the development is undertaken by the municipality or not [MGA section 218(1)(a)]. It may also enter into and carry out agreements with the Nova Scotia Department of Community Services, Canada Mortgage & Housing (CMHC) or similar agencies to assist in addressing housing issues [MGA section 59(b)] and expend money to carry out those agreements [MGA section 65(as)].

2. Depending upon the community and the housing supply and need, the measures that should be considered in ***planning documents*** include: enabling higher densities, smaller lot sizes and reduced yard requirements that encourage a range of housing types.

Providing for a variety of housing in every community may not be practical, especially in very small communities. However, where there is a need, municipalities are encouraged to include provisions in their ***planning documents*** which allow for a range of housing types, for example single and two unit dwellings, multi-unit row houses and apartment buildings.

Here are some suggested means for addressing this (the enabling section of the MGA for the land use by-law provisions are noted below) :

(1) dwelling unit density - permit increased density of residential dwelling units [S. 220(2)(a)&(4)(g)]. Allow increased density in parts of the community, so that for example not just single detached dwellings are permitted. Also consider permitting areas of increased density without requiring a developer to go through a development agreement or re-zoning process, since this takes more time and is more costly;
(2) lot size and frontage - reduce the lot size and frontage requirements to promote the development of the land [S. 220(4)(a)]; and
(3) yard sizes - reduce the size of the yards (i.e. front, side & rear) between the dwelling unit and the property line [S. 220(4)(f)].

All of these measures are ones which are likely to reduce the cost of development and hence make the housing more affordable.

3. There are different types of group homes. Some are essentially single detached homes and ***planning documents*** must treat these homes consistent with their residential nature. Other group homes providing specialized services may require more specific locational criteria.

In recent years the number of group homes and the need for them have increased. There are a variety of reasons for this including: the closing of larger residential institutions, the merits of smaller scale living, and the desire to create a home-like environment. A group home may be a place of long term residence or in other cases temporary or transitional housing for the people living there. It is there to serve a client group with certain needs, such as those with mental or physical disabilities.

Where the group home retains the character of an ordinary dwelling unit, in terms of things such as its appearance, and it functions as a home-like environment, they must be treated the same. For example the notion of dwelling and "family" cannot be used as a way to exclude these uses. The Supreme Court of Canada (Bell case 1979) and subsequent group home related cases have upheld this.

In cases where the group home does not have the character of an typical dwelling unit, the municipality should include policy in its MPS and provide for them in the LUB. They could be permitted in an institutional zone for example, since it may be necessary for them to be adjacent to a hospital in the case of residents who require regular medical treatments. Instead of conventional zoning a municipality might allow these uses by development agreement [S. 225 & 227]. A development agreement would allow the municipality to regulate details of the development and could, for example, permit the use to locate in various land use designations, depending on the needs of the residents in the group home.

4. Municipal ***planning documents*** must provide for manufactured housing.

Manufactured homes are merely a form or type of dwelling, typically a single unit, that is fabricated offsite and then brought to the residential property for use. In some cases the manufactured home may require some assembly once it arrives at its destination. Manufactured housing may take slightly different forms and go by different names such as mobile home, mini home or modular housing. Mobile home is the name that is most well recognized and long standing.

Manufactured housing cannot be excluded outright from an entire municipality, although it may not be appropriate in all parts of a municipality.

One basis for prohibiting manufactured homes in an area is for architectural reasons. For example, the external appearance of a manufactured home may not be in keeping with the character of a historic part of a municipality and so could be prohibited from that area for that reason. This would require rationale and policy in the MPS. The external appearance of structures can be regulated in the LUB under the authority of section 220(5)(i) of the MGA.

A municipality in its ***planning documents*** must allow for manufactured housing as a permitted use in some part(s) of the municipality.

DEFINITIONS

Planning Documents -	means a municipal planning strategy, land-use by-law, development agreement and subdivision by-law.

These are the definitions from the Statements of Provincial Interest (Schedule B of the MGA) package applicable to this Statement regarding Housing.

Note: these Guidelines as well as other information are available at the Service Nova Scotia & Municipal Relations Website - **www.gov.ns.ca/snsmr**

For clarification or additional information, contact:

Service Nova Scotia & Municipal Relations,
Municipal Services Division
P.O. Box 216, Halifax, N.S., B3J-2M4 424-3872

or

Nova Scotia Department of Community Services,
Housing Services Division
P. O. Box 696, Halifax, N.S., B3J 2T7 424-8402

- Appendix A -

Housing Need and Market Demand Studies

This report was prepared as part of a joint project sponsored by the Region of Queens Municipality and Service Nova Scotia and Municipal Relations related to the project **Housing Supply/Demand Market Study To Identify Housing Needs in the Liverpool Area**. The purpose of this report is to provide the municipality with guidelines for undertaking future housing needs and market demand analyses. It can also serve other municipalities interested in undertaking similar studies.

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Key Steps for Doing a Housing Study

1. Understand why the study is being done.
2. Profile the existing housing stock.
3. Assess various housing needs in the municipality.
4. Assess potential future housing demand.
5. Take action.

Benefits of a Housing Needs and Market Demand Study

Municipalities typically undertake local housing studies for one or more reasons:

1. Contribute to more effective community planning efforts, in terms of land use planning, and broader social and economic development planning.

2. Develop a better understanding of local needs and problems, in hopes of finding ways to address them.

3. Assess market potential for new housing development.

Sometimes there are trigger points that lead a municipality to undertake a study:

- There may be new business developments emerging and the municipality may want to encourage new housing development, or respond to housing development pressures.

- There may be developers and others wanting to build certain types of housing which cannot be accommodated within the existing Municipal Planning Strategy, and land use bylaws.

- There may be pressure from a local social action group to address housing problems they have identified.
- There may be a particular tragedy (series of house fires, loss of large tract of properties to natural disaster, etc.,) which spurs the need for new housing development.

- There may be an opportunity to leverage public funds to stimulate new housing development, if supporting documentation about need and demand can be supplied.

Regardless of the trigger point, there are many benefits to completing a housing needs and market demand study:

- Housing is a basic component to quality of life, and one of the key factors people consider when making decisions about where to live and work. If new businesses and people are to be attracted to the region, they will want to have reasonable housing choice - a choice of tenure, price ranges, types, and locations.

- With more knowledge about potential housing demands and needs, the municipality, the Province, and developers can embark on a strategy for acting on the opportunities.

- New information can be obtained about the depth and breadth of housing needs, and can potential lead to a new investment of public funds to address pressing problems.

- Better information about the potential future housing demand can contribute to more effective land use planning.

Scope: Objectives and Resources

Any municipality undertaking a needs assessment or market demand analysis must have answers to the following questions before beginning:

- Why are we doing a housing needs assessment / market demand analysis?
- What is the intended audience for the results of the work?
- What human, technical, and financial resources do we have to work with?
- How much time do we have to complete the assessment / analysis?

Answers to these questions will help to dictate the level of detail of the study, and the choice of method used to obtain the information required.

Methods and Information Sources to Consider

A decision must be made about whether or not there is a desire to obtain current, primary information from people in the community about their housing situation, needs, and demands, or to use published and unpublished secondary data (which could be dated). This will be dictated in part by the purpose of the study, and in part by the human and financial resources available.

Primary or Secondary Data?

Primary data
Information collected directly from the source, usually in the form a survey.

Secondary data
Published or unpublished sources of data from another organization, usually in summary formats.

Primary Information

This is usually collected in the form of a survey of a representative sample (or in smaller communities, a 100% sample) of households in the municipality, to collect the most current information about their housing situations. The advantage of this approach is that the information is current and accurate. The disadvantage is that this can be a very costly approach. Furthermore, depending on which method is used to employ the survey (telephone interviews, face-to-face interviews, self-administered drop off surveys, self-administered mail out and mail back surveys, etc.,), there can be limitations associated with the accuracy of the methods, the need for training

of interviewers, the willingness of people to respond to surveys, etc. A further disadvantage or limitation is that once the questionnaires are returned, someone on the team doing the housing study needs to put the information into a database (usually SPSS, EXCEL, or some other equivalent), manipulate the data (doing calculations from the raw information to get it ready for analysis), and generating the appropriate tables of information for analysis purposes. This requires skill and technical expertise.

A sample questionnaire to identify housing needs and potential housing demand in the municipality is provided in Appendix A. The questionnaire could also be modified to target specific sub-groups within a municipality (e.g., renters only, employees at a particular business, etc.,). If a survey is going to be used, it is highly recommended that the municipality appoint a staff person who is familiar with various survey methodologies and statistical analysis. If this is not possible, an external consultant with the appropriate expertise could be hired for this task, if the financial resources allow. Otherwise, it is highly recommended to avoid doing a survey if it cannot be completed properly.

Appendix B provides information about the minimum number of completed questionnaires that would be needed in order to be confident that the information collected is generalized to (or is representative of) the total population in the municipality.

Secondary Information

This is information collected by another organization and which is already tabulated in some way and made available to the municipality for their use and analysis. Most commonly this is data collected and packaged by a government department or agency, such as Statistics Canada (the census), CMHC (rental market surveys), or the provincial government (waiting lists for social housing units). It could also be from other organizations and bodies, private companies, or individuals. Table 1 provides a summary of common secondary data sources.

The advantage of these sources is that the information has already been collected (and in most cases, using a standardized methodology and data collection / report approach), which saves much time and potential cost. The disadvantage is that sometimes the information can be out of date, partial, or available only at a price. Another disadvantage is that for very small communities, or sub-portions of a municipality, the data collected by another agency may not be available.

Table 1: Common Secondary Data Sources

Source	Type	Description	Pros	Cons
Statistics Canada	Census data	- available as basic profiles and topical tables formats	- free of charge - most recent source of data for individuals and households - covers the entire municipality	- subject to "conditions of use" - may not be available at geographical level of interest
Statistics Canada	special custom tabulations from the Census	- available in electronic format that can be manipulated for local use	- provides much more detailed information about specific segments of the population	- available only at a cost - can take 4-6 weeks to receive data
Statistics Canada	Small Area Data	- uses annual taxfiler data to generate information about individuals, households, and their incomes	- annual data is very recent, more recent than the census (there is a 2-year delay) - available at postal code level plus larger levels of geography	- available only at a cost - no housing information in data set
CMHC	MLS sales statistics	- sales statistics for pre-defined MLS sales regions - shows list prices, sale prices, days on market - available for multiple years	- a very complete picture of the resale market	- available data may not match the local geography
CMHC	annual rental market survey	- survey of rental properties with 3 or more units - includes information about rents, unit sizes, vacancy rates	- annual, regular, comparable data - standardized method for data collection and reporting	- only available for communities of 10,000 or more population - in some provinces there may be regular or occasional rental market surveys of smaller communities
Provincial government	social housing information	- assisted housing supply (number of units and type of client they serve) - social housing waiting list (how many and which type of households)	- reasonably accurate picture of housing need - complete picture of assisted housing supply	- may only be available on a regional basis - includes only those who choose to put themselves on the waiting list (there may be others with needs)
Municipal government	variety of local data on an annual basis	- building permit activity - taxes - fees and levies - property ownership records - maps and plans - other locally appropriate data	- should be free - annual	- municipality may not have the data required

The secondary sources can also be supplemented with other contextual information, such as:

- key informant interviews (municipal staff, builders, developers, real estate agents, federal and provincial housing and community services staff, others with specific tacit knowledge related to the local and regional housing situation);

- local documents (planning documents, bylaws, economic development reports, feasibility studies, other reports);

- published literature related to housing trends and markets, and affordable housing; CMHC offers a wide range of housing products that are useful to the municipality, including the annual Canadian Housing Observer (CMHC, 2004b), housing market information, and research highlights on a wide range of topics (these are mostly free of charge and available on-line).

There is no single or best way to make a decision about which methods and data sources should be employed. This will be guided by answers to the questions in the foregoing section Scope: Objectives and Resources. Ideally, a combination of primary and secondary data sources would be used.

Profiling the Existing Housing Stock in the Municipality

A sometimes useful starting point for a municipality is the construction of a simple housing profile, usually using the most recent Census, and where available, supported by other relevant data. The purpose of a basic housing profile is to provide an overview of the current housing before getting into a detailed discussion about housing needs or potential housing demand. The components of a housing profile are summarized in Table 2. Such a profile includes information about the housing stock, characteristics of households and families, and housing market information.

Table 2: Housing Profile Data Summary

Type	Source	Description
The Housing Stock	- Census	- period of construction - structural type of dwelling (single detached, duplexes, apartments, row houses, movable dwellings) - state of repair (regular maintenance, major repair, minor repair) - average value of owned dwelling units - average rent paid
Population and Household Characteristics	- Census	- number of persons in various age groups (0-14, 15-24, 25-54, 55-64, and 65+) - number and size of households - number and type of households (non-family, families/couples with children, families/couples without children, lone parent families)
Supplemental Information	- Municipal government - CMHC - CMHC	- number, type and value of permit permits issued in recent years - real estate market activity - state of the rental market

The basic profile data from the census could be enhanced by the following topic-based tables:

Structural Type of Dwelling and Tenure for Occupied Private Dwellings, *Census Divisions and Census Subdivisions, 2001 Census* [Statistics Canada 95F0321XCB01006]

Age Groups of Primary Household Maintainer , Number of Household Maintainers and Tenure for Private Households*, Census Divisions and Census Subdivisions, 2001 Census* [Statistics Canada 95F0324XCB01006]

Household Type , Structural Type of Dwelling and Tenure for Private Households*, Census Divisions and Census Subdivisions, 2001* Census [Statistics Canada 95F0326XCB01006]

Tenure and Structural Type of Dwelling for Occupied Private Dwellings*, Census Divisions and Census Subdivisions, 2001 Census* [Statistics Canada 95F0447XCB01006]

Value of Dwelling and Structural Type of Dwelling (5) for Owner-occupied Non-farm, Non-reserve Private Dwellings*, Census Divisions and Census Subdivisions, 2001 Census* [Statistics Canada 95F0446XCB01006]

The advantage of using topic-based tables to develop a profile of the housing stock and its occupants is that it breaks the basic data into more detail. For example, the basic data may show that 75% of the dwellings are owner-occupied, and 25% are rented. However, the topic based table ***Household Type , Structural Type of Dwelling and Tenure for Private Households*** would show how many and which types of households are owners, and how many and which types are renters, and which types of dwellings they live in.

This basic profile information forms the basis of a starting point for the municipality to state "where we are at" in terms of housing, and provides the basis for interpreting information collected about housing needs and potential housing demand.

Assessing Housing Needs

A housing needs assessment is commonly understood to mean that an assessment is being undertaken to quantify the number and type of households and individuals who have one or more housing problems which are not being addressed by the current supply of housing in the municipality. These assessments are often undertaken with a view to developing a strategy to address some or all of these problems, or to make a case to another organization (such as a social action group or the provincial government) to assist with addressing these problems.

Vulnerable Groups Who Often Have Housing Needs

- Seniors living alone
- Single persons with low income
- People working at or near minimum wage
- Lone parent families
- People with disabilities

Core housing need is the standard measure across Canada to quantify the number of households and individuals who have readily quantifiable housing need (Pomeroy, 2004). A two-step procedure is used. First, people are considered to be in housing need if they have one or more of the following conditions:

- living in a unit that is in need of major repair (adequacy standard);
- living in a unit that is crowded, based on National Occupancy Standards (suitability standard);
- paying 30% or more of their income for housing (affordability standard).

Second, a means test is applied to determine if they have sufficient income capacity to address their housing needs. An income threshold is derived for the local market for each household size/bedroom type, based on the median rent of market housing that meets all three standards. If they do not have sufficient income to address their need, then they are in "core" housing need. These households are the focus of most social housing programs.

Published census profiles and topic-based tables do not provide this information on a community by community basis (however, CMHC has developed national and provincial overviews of core housing need). It would have to be ordered as a special custom tabulation from Statistics Canada. It is also difficult to construct a core housing need profile using surveys because people are sensitive about giving the specific income for a given year (they may be more comfortable specifying the income range within which it falls). Without a specific income, it is impossible to calculate core housing need. However, there are a series of proxy measures for people in housing need, which can be taken directly from the census. These are summarized in Table 3.

A deeper level of need is that known as at-risk of homelessness. Most research suggests that a household is at risk of becoming homeless or of not having one's own place to stay because of one or more conditions, including spending 50% or more of gross household income on shelter costs regardless of tenure, or a lack of security of tenure (Total, 2004). A special custom tabulation can be requested at a cost from Statistics Canada if there is a desire to have this statistic reported at the municipal level.

Table 3: Housing Needs Data Summary

Type	Source	Description
Housing Conditions	- Census - Community survey	- how many and which types of households live in poor housing conditions - housing in need major repair - how many and which types of households live in poor housing conditions - housing in need major repair
Crowding	- Census - custom tabulations - Community survey	- how many and which types of households live in crowded conditions - how many and which types of households live in crowded conditions
Housing Costs	- Census - Census - custom tabulations - Small area data	- how many and which types of households pay 30% or more of their monthly income for housing costs - incidence of low income - how many and which types of households live in pay 50% or more of their monthly income for housing costs - incidence of low income
Supplemental Information	- Provincial government	- number and type of households on social housing waiting lists - number and type of households on waiting lists for housing repair assistance programs

The following tables from the Census are especially useful for providing insights into the nature of housing needs:

Period of Construction , Condition of Dwelling and Tenure for Occupied Private Dwellings, Census Divisions and Census Subdivisions, 2001 Census [Statistics Canada 95F0325XCB01006]

Household Type , Tenure and Housing Affordability for Private Households With Household Income Greater than Zero, in Non-farm, Non-reserve Private Dwellings*, Census Divisions and Census Subdivisions, 2001 Census* [Statistics Canada 95F0444XCB01006]

With information about the number and type of households which have housing needs, plans can be made to develop a strategy to meet some or all of the needs.

Assessing Potential Future Housing Demand

The purpose of assessing potential future housing demand is to develop a sense of the broader housing requirements over a short to medium term future. This helps to influence municipal planning, and can form the basis for better decision making by investors and developers about potential housing developments in which they may be interested.

Predicting the future is very difficult because there are so many potential influences which can affect how a community changes over time. Assessing the potential housing demand in a municipality requires careful thinking and understanding about recent trends in the municipality and region, the present situation, and plans for the future. This must be coupled with an understanding of broader demographic trends which will have an impact on the future of the municipality.

As our economy and society change over time, there may be changes in the types of individuals and households living in the municipality, and they may have different types of housing needs and preferences than those in the past. It is therefore important to understand what types of demand segments are emerging in the municipality.

Demographic Trends

- Aging of the population as a whole.
- Youth out-migration from rural areas.
- Aging of the baby boom generation.
- Delays in getting married, starting a family.
- More older people living longer.
- More people of all age groups living alone or in non-family households.
- Population migration to urban centres or to rural areas and small towns very near to urban centres.

Potential New Housing Market Demand Segments

- Older couples nearing retirement wanting to downsize.
- Elderly couples and single persons wanting to reduce their housing responsibilities, improve mobility.
- Young families seeking modest priced ownership housing.
- Employees of an expanding business or of a new business moving into the municipality.
- Single persons of all income groups.

At the same time, it is important to recognize that there is *a very real difference* between **potential** and **actual** demand for new housing. Individuals will make choices and take actions based on their own personal preferences and circumstances. Individually and collectively these may result in decisions and actions which lead to some other outcome than was predicted.

On an individual basis, for example, if you ask someone if they would be interested in living in a new condominium development, they may say "yes, very likely." Enough people may provide a similar answer for a developer to feel confident about building such a development. However, when the condominium units are offered for sale, these individuals will assess their own preferences and circumstances, and they may or may not follow through with their interest in living in a condominium. This might be because any or all of the location, price, design, amenities or other features do not suit them. This might be because they are unable to sell their existing property. This might be because their personal circumstances (such as failing health, for example) have changed since they were asked about their interest in a condominium.

Basic Steps for Projecting Future Demand

1. **Understand broader demographic trends.**
2. **Develop assumptions about the future of the municipality.**
3. **Start with the population base today.**
4. **Look at recent population trends and project the number of people and by age group.**
5. **Look at recent household trends and project the number and type of households.**
6. **Look at recent tenure and structural type trends and project the number of each.**
7. **Identify which market segments will demand housing, based on local interviews and the projections.**
8. **Interpret the results:**
   - **Estimate the number of units in the stock likely to be lost due fire, abandonment, etc.**
   - **Take into account local information about the type and price of housing people are asking for.**
   - **Match new units required against potential demand segments.**
   - **Take into account issues of price and incomes of households in each demand segment.**

On a collective basis, there may be statistical evidence from recent trends and future projections (based on reasonable assumptions) that there will be a sufficient number of households which have the same profile as those who would typically demand or live in a particular housing type. However, there may be some deviation from this as a result of a local or regional change in the economy, or a change in the delivery of public services.

In the late 1980s CMHC developed a model for estimating potential housing demand on a national and provincial basis (Lewis, 1991). The model is built primarily around the need to project the increases in the number of households and types of households. It requires a series of assumptions about future scenarios for tenure and dwelling type choices based on a variety of information, most notably past and present trends with respect to a variety of demographic features of the population. The key features of the model include:

Population Projection - starting with a base population today, how will the combined effect of fertility rates, life expectancy, immigration, emigration, and interprovincial migration affect population estimates (by age cohorts) over the next few years?

Household Projection - given the projected population and age cohorts, how many and what type (families with or without children, lone parents, single persons, etc.,) of households will there be over the next few years?

Demand Projection - given the number and type of households, what mix of tenure choices (ownership or rental) and structural type choices (single detached, apartments, etc.,) are required to meet their needs?

Table 4 provides a summary of the data sources that could be used to complete this task.

Table 4: Potential Future Housing Demand Data Summary

Type	Source	Description
Population	- Census (historical and current) - Migration estimates from CMHC or Statistics Canada small area data (recent)	- basic profiles of changes in the population (number and age cohorts) - number, type and characteristics of persons moving into and out of the municipality or region, based on taxfiler data
Households	- Census (historical and current)	- basic profiles of changes in households (number and type)
Housing Tenure and Type	- Census (historical and current)	- basic profiles of changes in tenure (number of households which own and rent) - basic profiles of changes in the structural type of dwellings occupied (number of single detached, apartments, etc)
Potential Demand Segments	- Community survey - Key informant interviews	- response to questions about housing interests, preferences, and choices - identification of which types of households are looking for what types of housing
Price and Income	- MLS sales activity - CMHC rental market survey - Census - Small area data	- price of resale and new homes - average rent by unit size (may need to use Census average rent paid if this data is not available) - median and average incomes, number of households in each income bracket - median incomes, number of households in each income bracket
Supplemental Information	- Key informant interviews - Document review	- real estate agents, economic development officers, builders, developers, property owners, others - local and regional land use and economic development plans, feasibility studies, provincial reports and estimates, CMHC annual housing outlook, reports about market trends, others

Depending on the intended purpose of the housing study, there may be interest in developing some initial projections related to affordability and price sensitivity. For example, the study could be intended in part to develop a sense of the potential demand for and ability to pay for high quality apartment units with many amenity features. A developer or the municipality may have in mind an approximate monthly rent for such a development. In order to get a good sense of this, a survey of people asking about what kinds of housing they are interested in, and how much they would be willing to pay would be helpful. At the same time, it will be important to know the distribution of income by household type in the municipality (taken from the Census and / or Small Area Data profiles) to understand how many households might be able afford such a development. It is very important to keep in mind, however, that these estimates would only be potential demand for such housing, and would not necessarily represent what people will actually choose do if such a development were to be built.

With information about the projected number and type of dwelling units required in the municipality in the short and medium term future, plans can be made to develop a strategy to facilitate the construction of these units. This may include revising or updating municipal planning strategies (zoning and bylaws, for example), undertaking feasibility studies, and sharing the result with potentially interested builders and developers.

Taking Action

Once the municipality has decided to go ahead with a housing study, it is time to take action. The next steps should include:

- Appoint a committee to work on the project.
- Follow the steps outlined in section 1.1 of this document.
- Layout a plan, including purpose, timeframes, resources, and responsibilities.
- Hire technical support, if necessary.
- Complete the housing study.
- Share the results.
- Act on the recommendations.

The municipality must be committed to taking action on the findings of any housing needs and market demand study. A lack of commitment to action will mean that people in the municipality and other stakeholders will be disappointed and less inclined to participate in a similar type of activity in the future.

Two key actions that typically emerge from such a study are:

- The development of a proposal for funding assistance to build new affordable housing to meet the needs of households experiencing affordability problems.
- The development of feasibility studies or proposals for new market housing.

In either case, the municipality should feel confident to invite the participation of stakeholders and partners to work with them in the development of such proposals, so that positive action can be taken.

References:

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Statistics Canada. 2003. **2001 Census Dictionary**. Ottawa. Cat. No. 92-378-XIE. Pages 164-65.

Statistics Canada. 2002. **2001 Small Area Income and Demographics: User's Guides**. Ottawa: Statistics Canada.

Statistics Canada. 1997-2002. **Migration Estimates (Tax Filer Data, 1997-2002)**.

Statistics Canada. 1986, 1991, 1996, 2001 **Census of Canada**. Ottawa: Statistics Canada.

Tota, K. 2004. **Homelessness in Halifax Regional Municipality (HRM): A Portrait of Streets and Shelters**. Halifax Regional Municipality, Planning and Development Services.

Useful websites:

Statistics Canada www.statcan.ca Look here for information about the census, community profiles, and small area data.

Canada Mortgage and Housing Corporation www.cmhc.ca Look here for rental market information, research highlights, the annual Canadian Housing Observer, and the annual Housing Outlook (for the nation and each province).

Nova Scotia Community Counts http://www.gov.ns.ca/finance/communitycounts This provides singlepoint access to socio-economic data that can be searched by categories, such as health, education, or income, as well as by community.

Appendix A-1

Survey to Determine Housing Needs and Preferences

This section contains a potential questionnaire that could be used to implement a survey of housing needs in the municipality. A word of caution: successfully completing a survey requires careful attention to detail, a consistent methodology applied to collecting all of the information, and appropriate technical skills to manipulate and analyze the data. The data collected from the survey will only be as good as the resources devoted to making it a success. The municipality should ensure that staff persons directed to operationalize the survey have the experience and skills to do so, or they should be provided with the financial resources to hire the appropriate technical skills.

In addition, there are many good resources on how to properly conduct a survey and to analyze the results, and these should be consulted by staff if there are any doubts about carrying out this task. Consult with Statistics Canada staff, other municipalities who may have carried out a similar survey, provincial government staff, or contact a university.

The following questionnaire in whole or in part is offered as a template which municipalities may wish to modify for their own information needs.

Sample Questionnaire

Introduction

This survey will help to learn more about housing for residents in _____. The information you provide will help decision-makers and community groups make informed decisions over municipal planning and housing development. Input from all residents is very important. All information will be kept confidential and no one will be able to identify who you are from the survey. We are only interested in the combined results from all people in the municipality.

(A) Household Questions

In this section, we would like to ask about you and your family. These questions are important because they help to create a profile of the municipality. The answers are completely confidential.

- Where do you live? (Please check one)
  (list potential places here, that you might be interested in including in the survey information from people both within and outside the municipality)

- Please fill out the following chart to describe your household composition. Please include all of the people who live in your dwelling unit.

	Gender	Year of Birth
Person 1		
Person 2		
Person 3		
Person 4		
Person 5		
Person 6		

- What is your marital status? (Please check one)

  - Single - never married
  - Married
  - Live-in partner or common-law partner
  - Separated
  - Divorced
  - Widowed

- Do you have any dependants (people who live with you and depend on you to provide food, clothing, and shelter) in your household? (Please check all that apply)

  - Children
  - Elderly
  - Special needs
  - Other, please specify:_____

- What is your total household income for the past year, before taxes and deductions? (Please check one)

  - 0 - $19,999
  - $20,000 - $39,999
  - $40,000 - $59,999
  - $60,000 - $79,999
  - $80,000 - $99,999
  - $100,000 - $119,999
  - $120,000 or more
  - Do not know

- Does anyone in your household require special medical attention?

  - Yes
  - No
    - If Yes, please specify:_____

(B) Housing

Questions in this section relate to your housing, and to the housing situation in _____ for all residents.

- Do you live in a: (Please check one)

  - Single detached house
  - Duplex (side by side or up-down)
  - Row Housing / Town House development
  - Mini-Home or moveable dwelling
  - Apartment
  - Basement suite
  - Other, please specify:_____

- Is this dwelling:

  - owned by you or a member of this household (even if it is still being paid for)?
  - rented (even if no cash rent is paid)?

- How many rooms are there in this dwelling? Include kitchen, bedrooms, finished rooms in attic or basement, etc. Do not count bathrooms, halls, vestibules and rooms used solely for business purposes.

  _____

- How many of these rooms are bedrooms?

  _____

- Are there stairs between the main living section of the house and the bedrooms?

  - Yes
  - No

- Are there stairs to enter the house by the main entrance?

  - Yes
  - No

- When was this dwelling originally built? Mark the period in which the building was completed, not the time of any later remodeling, additions or conversions. If year is not known, give best estimate.

  - 1920 or before
  - 1921-1945
  - 1946-1960
  - 1961-1970
  - 1971-1980
  - 1981-1985
  - 1986-1990
  - 1991-1995
  - 1996-2001

- Is this dwelling in need of any repairs? Do not include desirable remodeling or additions.

  - No, only regular maintenance is needed (painting, furnace cleaning, etc.)
  - Yes, minor repairs are needed (missing or loose floor tiles, bricks or shingles, defective steps, railing or siding, etc.)
  - Yes, major repairs are needed (defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc.)

- For this dwelling, what are the YEARLY payments (last 12 months) for:

  - electricity?
    - _____ OR
    - None
    - Included in rent or other payments

  - oil, gas, coal, wood or other fuels?
    - _____ OR
    - None
    - Included in rent or other payments

  - water and other municipal services?
    - _____ OR
    - None
    - Included in rent or other payments

- For RENTERS only: What is the monthly rent paid for this dwelling?
  - _____ OR
  - Rented without payment of cash rent

- For OWNERS only:
  - What are the total regular monthly mortgage or loan payments for this dwelling?
    - _____ OR
    - None
  - Are the property taxes (municipal and school) included in the amount shown in 16a?
    - Yes
    - No
  - What are the estimated yearly property taxes (municipal and school) for this dwelling?
    _____
  - If you were to sell this dwelling now, for how much would you expect to sell it?
    _____
  - Is this dwelling part of a registered condominium?
    - Yes
    - No
  - If yes, what are the monthly condominium fees?
    _____

(C) Current Housing Needs

- Does the housing you currently live in meet your needs?
  - Yes
  - No (please describe) _____

- If no, what type of housing do you require?

  - Single detached house
  - Duplex (side by side or up-down)
  - Row Housing / Town House development (please specify number of bedrooms required) _____
  - Mini-Home or moveable dwelling
  - Apartment (please specify number of bedrooms required) _____
  - Basement suite
  - Other, please specify:_____

- Would you prefer to be:

  - A homeowner
  - An owner in a condominium complex
  - A homeowner in a land leased community (similar to a mini-home park)
  - A renter

- Where would you prefer that this housing be located / where you would prefer to live? Write in the name of the community, neighbourhood, or street as appropriate.

- How much would be willing to pay for this housing?

  - Purchase price _____ OR
  - Monthly rent _____

- In the space below, please provide us with any other information about your housing situation or your housing needs and preferences that you think we should know about.

Thank you for your help in completing this survey.

Appendix A-2

Survey Sample Size Thresholds

If the decision is made to do a survey of households in the municipality, it is important to obtain a sufficient number of completed questionnaires so that the results are generalized to the entire population of the municipality. This means, that, for example, if there are 500 households in the municipality (this number can be obtained from the most recent Census), than a minimum of 223 questionnaires need to be completed in order to be confident that the results you obtain would be the same as those you would obtain if every household completed the questionnaire.
Statistical studies have demonstrated over the years that only a sample, not a full census of everyone, is a reasonable and reliable way to obtain information about the population as a whole. However, if financial, time, and human resources permit, a full census or 100% sample is preferred.

Estimates of the number of completed questionnaires required are as follows:

This many households in your municipality	This many questionnaires should be completed	This many households in your municipality	This many questionnaires should be completed
50	44	750	261
75	63	800	267
100	80	850	273
125	96	900	278
150	109	950	282
175	122	1000	286
200	134	1500	316
225	144	2000	334
250	154	2500	346
275	164	3000	353
300	172	3500	360
400	201	4000	365
450	213	4500	369
500	223	5000	372
550	232	10000	386
600	241		
650	248		
700	255		

The results will be considered generalized, or accurate to +/- 2.5%, 19 times out of 20, if the same survey were to be repeated again in the municipality.