

TOWN OF STONY PLAIN

Land Use Planning Support Studies

Land Absorption Study

Final Report

February 2026



Prepared by ISL Engineering and Land Services Ltd.

ISL Engineering and Land Services Ltd. is an award-winning full-service consulting firm dedicated to working with all levels of government and the private sector to deliver planning and design solutions for transportation, water, and land projects.

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1.0 Introduction

Over the last decade, Stony Plain has experienced significant change. Efforts to prioritize critical infrastructure investments, local and regional transportation, environmental sustainability, and diverse housing options have resulted in increased growth, business attraction and retention, and development interest.

Considering these recent trends, the Town is at a pivotal point in its trajectory, where it must continue to take advantage of growth opportunities while addressing emerging and widespread issues, such as housing and climate change. This requires independent advancement as well as effective coordination of multiple resources and areas of expertise.

Land use planning plays a key role in this process, offering a framework to guide responsible growth and development in alignment with community values. Accordingly, the Town is set to undertake a review of its Municipal Development Plan (MDP) in 2026 and is also pursuing other master planning efforts that will work synergistically with the MDP. In preparation for these efforts, the Town has commissioned a series of Land Use Planning Support Studies, including:

- Land Absorption Study
- Environmentally Significant Areas (ESA) Identification Study
- Land Use Framework

This report corresponds to the Land Absorption Study, aiming to take inventory of the current land supply in the town and provide insights into historical and future land absorption and development trends. The study area comprises all lands within the current town boundary, as of December 2025. This study will serve as a critical input for the Land Use Planning Framework, allowing the Town to test policy scenarios and make informed decisions on land redistribution and growth management.

This report is structured to move from a baseline understanding of existing conditions toward a forward-looking assessment of future land needs. It begins with a **Land Supply Analysis (Chapter 2)**, establishing the current distribution of absorbed, unabsorbed, and undevelopable lands across key land use categories. This is followed by **Historical Land Absorption Analysis (Chapter 3)**, which documents subdivision activity over the past several decades to illustrate long-term land absorption patterns. The **Growth Assumptions (Chapter 4)** section then outlines the demographic, development, and market variables that will inform the land demand model. Building on these components, the **Land Demand Modelling (Chapter 5)** estimates the amount of land required to accommodate anticipated growth. The report concludes with **Recommendations (Chapter 6)** that position the study's outcomes to support the Town's broader planning and policy initiatives.

2.0 Land Supply Analysis

This section establishes a baseline land inventory using a GIS-based methodology to identify absorbed, unabsorbed (or remnant), and undevelopable lands within the town. This inventory provides a better understanding of the amount of land that remains available to accommodate future development. Once combined with growth projections, the results of this analysis can confirm that sufficient lands are available to accommodate anticipated growth or determine when more land is likely to be required.

2.1 DEFINITIONS

A typical land supply analysis disaggregates lands into two overarching land use categories – **absorbed land supply** and **unabsorbed land supply**.

Absorbed land supply is defined as lands districted under the Land Use Bylaw (LUB) and subdivided for the intended development. This includes districted and subdivided parcels that are fully developed, partially developed, or undeveloped but shovel-ready, awaiting site development uptake through the development permit approval process. The absorbed land supply is typically unavailable to accommodate future growth, except for through site development uptake (or infill), intensification, or redevelopment.

Unabsorbed land supply (or available land supply) is defined as land not yet districted and/or subdivided for its ultimate intended development. In some cases, unabsorbed lands are already districted but not yet subdivided. Future land uses within the unabsorbed land supply are typically based on LUB districting, approved area structure plans (ASPs), and future land uses identified in other applicable statutory plans, like the MDP.

Both the total absorbed and unabsorbed land supplies are measured in gross developable area (GDA), which is the total area encompassed by an existing or future development, including overhead uses (i.e., roads, parks, and public utilities) and special land dedications (e.g., municipal or school reserves). GDA, however, does not include **undevelopable lands** such as environmental reserves, landfills, cemeteries, golf courses, and any other lands with an existing or future use or constraint that makes them unavailable to accommodate any portion of a residential, commercial, industrial, or public service development in the long-term. This means that undevelopable lands need to be identified and subtracted from the gross area of the town before the total GDA can be calculated and subsequently disaggregated into the absorbed and unabsorbed land supplies.

2.2 METHODOLOGY

The approach to the land supply analysis largely adheres to the above definitions. A GIS-based methodology is used to allocate a land use category to every parcel in the town, which indicates whether each parcel is absorbed, unabsorbed, or undevelopable. Absorbed and unabsorbed parcels are further broken down by core land use (i.e., residential, commercial, industrial, and public service), and absorbed overhead uses (i.e., existing roads, parks, and public utilities) are also identified.

The preliminary allocation of land use categories is drawn from registered parcel designations (e.g., ER, MR, PUL, etc.), LUB districting, and ASP and MDP land use designations, where available.

Where ambiguities or peculiarities are observed, the directions from the above are audited through the review of imagery available through Google Earth, and/or Google Street View (where coverage is available). Engagement with Town representatives and professional judgement are also used to resolve identified gaps and conflicts. This auditing process often results in some evidence-based overrides to preliminary land use category assignments.

Following the typical land supply approach, after this process is completed all parcels within the town should be assigned to an absorbed, unabsorbed, or undevelopable land use category. However, a modified approach was needed for the purposes of this study, as described below.

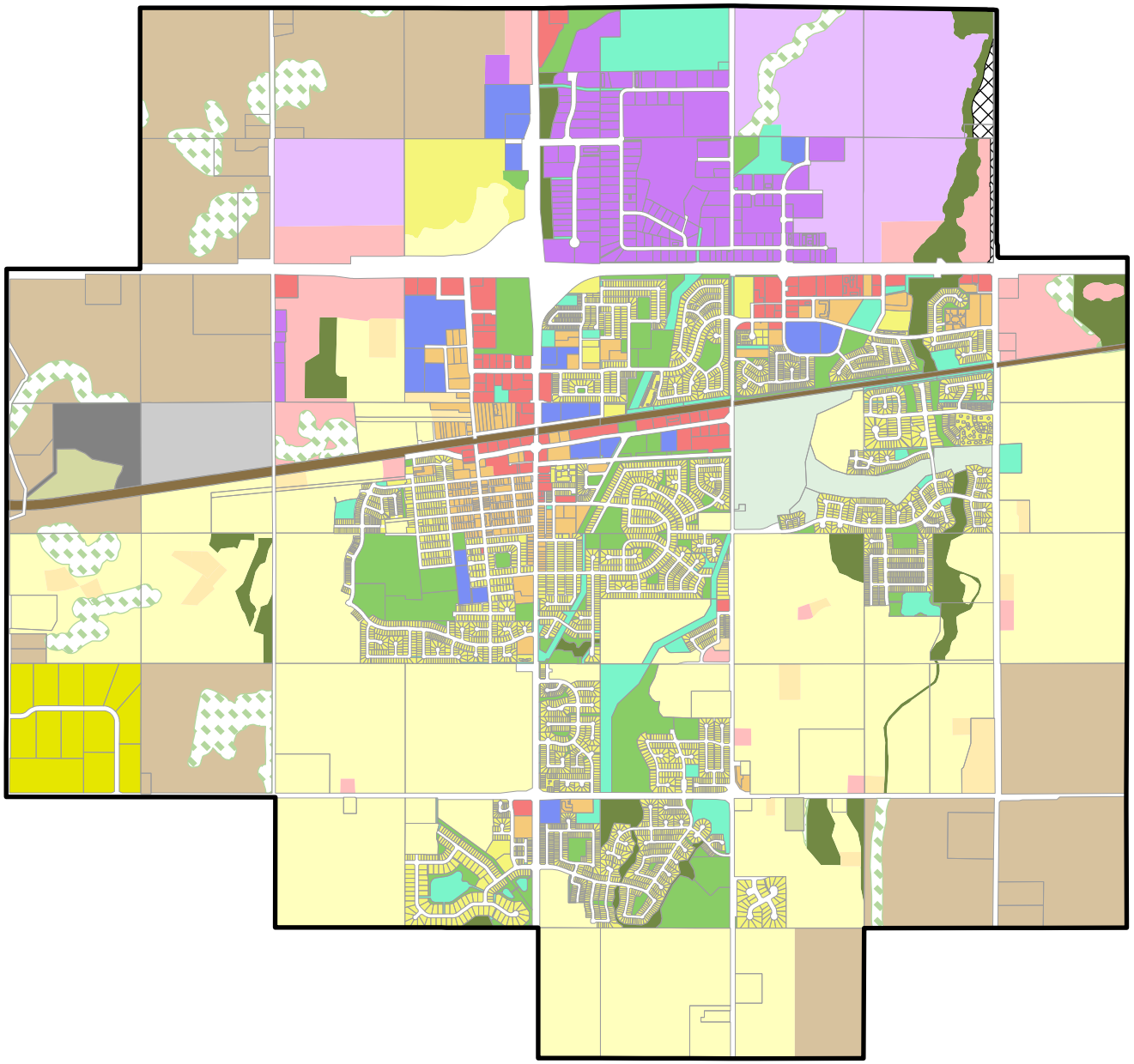
The town has a subset of unabsorbed parcels that are not planned through an ASP and are identified as Future Urban Development (FUD) in the MDP. Since there is no specific land use assigned to these parcels, two options became available:

- In collaboration with the Town, determine whether each of these parcels is unabsorbed residential, commercial, or industrial, despite them not being officially planned as such in a statutory plan; or
- Leave them in a separate category, treating them as reserve land that the Town will need to utilize as the unabsorbed land supply is depleted through future growth.

The Town's preference was to proceed with the latter. Thus, in addition to the absorbed and unabsorbed land supplies, the analysis presented below includes a category for FUD. This land is to be interpreted as an unabsorbed land supply that has not yet been allocated to a core land use and will be unlocked as growth pressures emerge.

2.3 FINDINGS

Map 1 illustrates Stony Plain's land supply as of December 2025. As presented in **Table 2.1**, the town has a total land base of 3,691.4 ha. Of this, 377.7 (10.2%) corresponds to undevelopable land, including cemeteries, existing and future environmental reserve for the protection of wetlands and watercourses, the golf course, the landfill, the railway, a Town-owned parcel that is topographically constrained for future development, and the recently approved annexation area that will soon be under the City of Spruce Grove's jurisdiction.



TOWN OF STONY PLAIN

- Town Boundary
- Parcel

Land Supply

- Absorbed Residential
- Absorbed Rural Residential
- Absorbed Mixed Use
- Absorbed Commercial
- Absorbed Industrial
- Public Service
- Schools, Parks, and Open Spaces
- Environmental
- Public Utility
- Golf Course
- Landfill
- Railway
- Cemetery
- Constrained Land
- Unabsorbed Residential
- Unabsorbed Mixed Use
- Unabsorbed Commercial
- Unabsorbed Industrial
- Future Urban Development
- Potential Future Environmental
- Spruce Grove Annexation

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Land Absorption Study
Map 1: Land Supply

The remaining 3,313.7 ha (89.8%) makes up the total GDA. As mentioned in the previous subsection, this is broken down into the absorbed land supply (1,373.9 ha or 37.2%), unabsorbed land supply (1,327.6 ha or 36%) and FUD lands (612.2 ha or 16.6%).

Table 2.1 Undevelopable and Gross Developable Land Supply

Gross Developable Land Supply		
Category	**Area (ha)**	**Percent**
Gross Area	**3,691.4**	**100.0%**
Undevelopable Area	**377.7**	**10.2%**
Gross Developable Area	**3,313.7**	**89.8%**
Absorbed Land Supply	1,373.9	37.2%
Unabsorbed Land Supply	1,327.6	36.0%
Future Urban Development	612.2	16.6%

Table 2.2 presents a breakdown of the town's 1,373.9 ha of gross developable absorbed land supply. This includes lands that have already been consumed for:

- Core land uses (759.6 ha or 55.3%), including residential, commercial, industrial, and public service; and
- Developable overhead land uses (614.3 ha or 44.7%), including circulation, schools, parks and open space, and public utilities.

It is uncommon for net developable overheads to exceed 40% of the gross developable absorbed land supply. In this case, the prominence of overhead uses can be explained by the presence of two highways (Highway 16A and Highway 779), which increases the percentage of gross developable absorbed area dedicated to circulation from a typical range of 15%-23% to the town's 26.7%

Table 2.2 Gross Developable Absorbed Land Supply

Absorbed Land Supply		
Category	**Area (ha)**	**Percent**
Gross Developable Absorbed Land Supply	**1,373.9**	**100%**
Total Net Developable Core Land Uses	**759.6**	**55.3%**
Urban Residential	407.4	29.6%
Rural Residential	60.8	4.4%
Commercial	84.9	6.2%
Industrial	156.0	11.4%
Public Service[1]	50.6	3.7%
Total Net Developable Overhead Land Uses	**614.3**	**44.7%**
Circulation	367.3	26.7%
Schools, Parks and Open Spaces	148.6	10.8%
Public Utilities	98.5	7.2%

[1] Public service excludes schools.

Table 2.3 presents a breakdown of the town's 1,327.6 ha of gross developable unabsorbed land supply that is available for future development. This includes 1,008.2 ha (75.9%) for future residential, 121.9 ha (9.2%) for future commercial, and 197.6 ha (14.9%) for future industrial uses.

Table 2.3 Gross Developable Unabsorbed Land Supply

Unabsorbed Land Supply		
Category	**Area (ha)**	**Percent**
Gross Unabsorbed Land Supply	**1,327.6**	**100%**
Residential	1,008.2	75.9%
Commercial	121.9	9.2%
Industrial	197.6	14.9%

3.0 Historical Land Absorption Analysis

A historical land absorption analysis examines how land has transitioned from unabsorbed to absorbed status over time through the registration of plans at Alberta Land Titles. By tracking the cumulative area of land absorbed through this process, the analysis provides insight into the pace and pattern of development and establishes an empirical basis for understanding long-term growth trends. When extended forward, historical absorption rates can be used to estimate the timeframe over which remaining unabsorbed lands may be absorbed, based on the assumptions that land uses can shift in response to market demand and that currently unabsorbed lands will ultimately participate in the development process.

3.1 METHODOLOGY

Stony Plain's historical land absorption was analyzed by:

1. Identifying the plan registration year for all absorbed parcels, including core land uses and net developable overheads.
2. Calculating the gross and gross developable areas of all registered plans prior to 1976.
3. Calculating the gross and gross developable area of plans registered in successive 5-year intervals from 1976 to 2025.

Notably, as shown in **Table 3.1**, there were 6.8 gross hectares or 5.7 gross developable hectares (gdha) where the plan registration year was unknown.

This approach allows for a consistent comparison of land consumption over time and supports alignment with the land supply and land demand analyses presented in other sections of this report.

3.2 FINDINGS

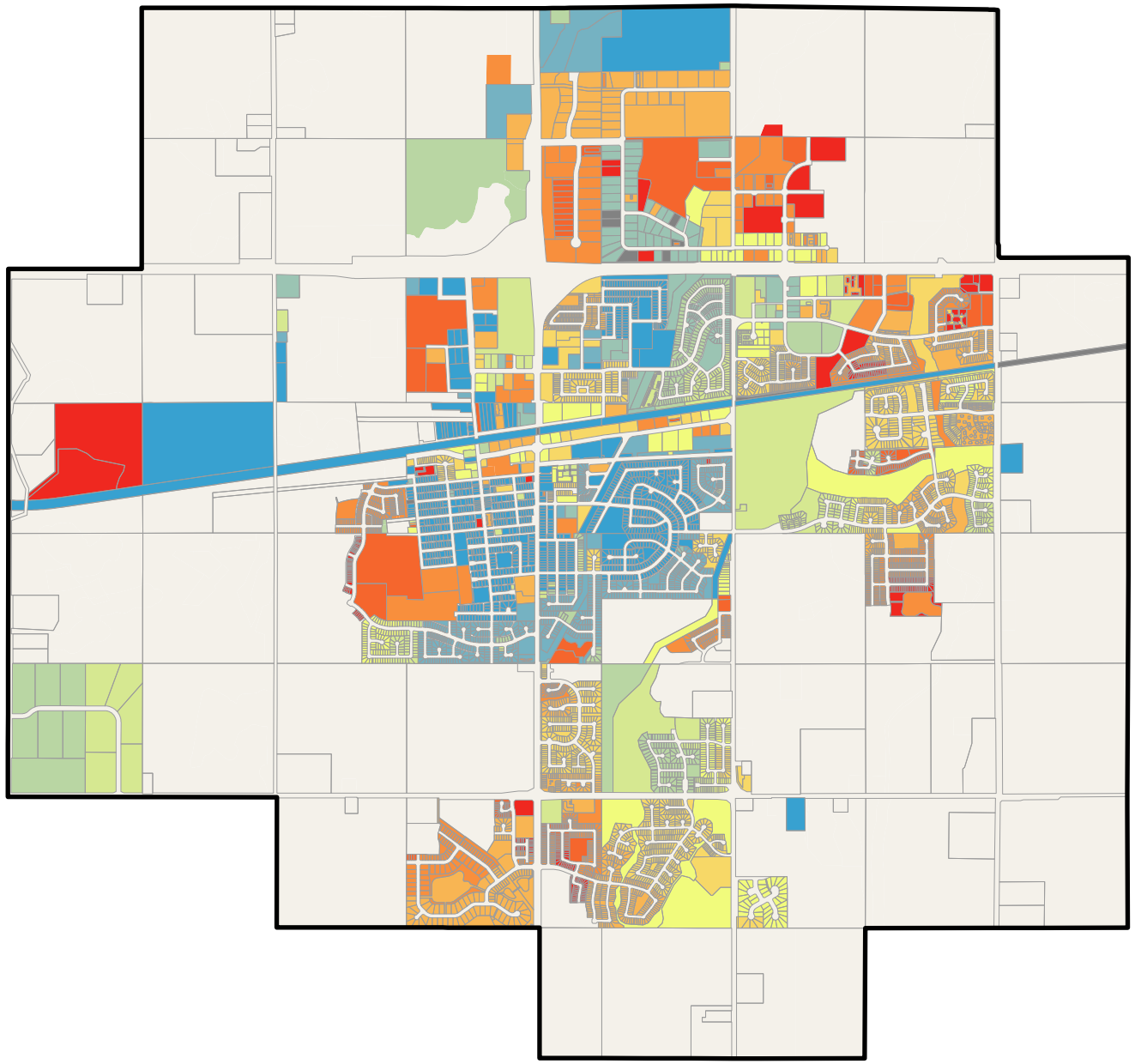
As illustrated in **Map 2** and presented in **Table 3.1**, 198.1 gdha of land had been absorbed in Stony Plain through the plan registration process prior to 1976. In the approximate 50 years since, another 1,171.2 gdha were absorbed through the plan registration process through to 2025 – an average annual consumption of 23.4 gdha. This excludes the 5.7 gdha for which there is no known plan registration year.

As shown in **Figure 3.1**, 2006 to 2010 stands out as the period with the highest land absorption, totaling 186.6 gdha for an average annual absorption of 37.3 gdha. In contrast, 2021 to 2025 has been the period with the lowest land absorption, totaling 49.4 gdha for an average annual absorption of 9.9 gdha. This apparent reduction in land absorption is partially due to the higher residential densities the town has seen in recent years. This means that the slower rate of absorption does not necessarily correlate to a decrease in development activity. Rather, the Town is developing land more efficiently.

Based on the analysis in **Table 3.1**, it would take 56.7 years from 2026 for the town's unabsorbed land supply of 1,327.64 gdha (refer to **Table 2.3** in **Chapter 2**) to be consumed through the plan registration process if:

- the approximate 50-year average annual land absorption of 23.4 gdha was carried forward;
- there was complete flexibility to allocate land uses across the City's remaining unabsorbed lands; and
- all owners of the unabsorbed lands were to participate in development.

Since these assumptions are not entirely realistic, a more thorough land requirements analysis is needed to better understand the Town's long-term land needs. The following two chapters deal with this analysis, first describing the growth assumptions underlying the land requirements model, and then describing the modelling process and outcomes.



TOWN OF STONY PLAIN

Town Boundary
Parcel

Absorption Period

- Pre-1976
- 1976-1980
- 1981-1985
- 1986-1990
- 1991-1995
- 1996-2000
- 2001-2005
- 2006-2010
- 2011-2015
- 2016-2020
- 2021-2025
- Unknown
- Unabsorbed Land Supply

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Land Absorption Study
Map 2: Historical Land Absorption

Table 3.1 Historical Land Absorption Analysis, 5-Year Intervals

Period	Absorbed Area				
	Gross Area[2] (ha)	Undevelopable Area (ha)	Gross Developable Area[3] (gdha)	Estimated Gross Developable Area with Circulation[4] (gdha)	Average Annual Gross Developable Area with Circulation
Pre-1976	213.0	67.7	145.2	198.1	N/A
1976-1980	77.1	0.1	77.0	105.1	21.0
1981-1985	47.3	0.0	47.3	64.5	12.9
1986-1990	106.2	0.0	106.2	144.9	29.0
1991-1995	130.3	38.6	91.7	125.1	25.0
1996-2000	96.0	26.8	69.2	94.4	18.9
2001-2005	113.0	8.6	104.5	142.5	28.5
2006-2010	143.5	6.7	136.8	186.6	37.3
2011-2015	117.4	3.0	114.4	156.0	31.2
2016-2020	76.6	1.4	75.2	102.6	20.5
2021-2025	67.5	31.3	36.2	49.4	9.9
Subtotal	**1,187.9**	**184.2**	**1,003.7**	**1,369.3**	**23.4**
Unknown	6.8	2.6	4.2	5.7	N/A
Total	**1,194.7**	**186.8**	**1,007.9**	**1,375.0**	**–**

[2] Excludes circulation.
[3] Excludes circulation.
[4] Calculated based on the assumption that 26.7% of the gross developable absorbed land supply corresponds to circulation (refer to **Table 2.2** in **Chapter 2**).

Figure 3.1 Absorbed Gross Developable Hectares by 5-Year Period



4.0 Growth Assumptions

This section defines the land demand generator assumptions established in collaboration with the Town to serve as inputs for the land requirements model.

4.1 RECOMMENDED POPULATION GROWTH PROJECTION SCENARIO

The Town undertook population and employment forecasts in 2022[5]. The forecasts have a 20-year horizon (2021 to 2041) and include three growth scenarios as shown in **Table 4.1.**

Table 4.1 2022 Population Forecasts

Growth Scenario	Compound Annual Growth Rate	2041 Population Projection	2076 Extrapolated Population Projection
Low Growth	1.0%	21,769	30,383
Medium Growth	1.7%	25,056	44,728
High Growth	2.4%	28,807	65,643

Long-term growth planning requires looking at a high-growth scenario to anticipate future land and infrastructure needs. By planning for this possibility, the community can ensure there is enough land available and that infrastructure is provided to accommodate rapid growth over time. Thus, it is recommended that the Town utilize the High Growth scenario presented in **Table 4.1** for its long-term planning goals. Specifically, the land requirements model uses the High Growth scenario's 2076 extrapolated population projection to cover a 50-year horizon (2026-2076).

Using the High Growth Scenario accounts for the real possibility that population and employment growth may exceed expectations. If actual growth is slower, the land supply planned under this scenario would still provide capacity well beyond 50 years. This approach is consistent with growth study precedents in Alberta. For example, the City of St. Albert supported an annexation with a midpoint between medium and high growth, and Edmonton's most recent growth study recommended using a high growth scenario.

[5] Town of Stony Plain Population and Employment Forecast (2022)

4.2 RESIDENTIAL INTENSIFICATION ALLOWANCE

The Town's MDP applies an aspirational residential intensification target of 15%. This means that the Town should strive to direct 15% of its future dwelling unit construction to its already built-up urban area. This can be achieved through the construction of additional dwelling units on lots that are currently occupied by low-density housing typologies (i.e., detached and semi-detached homes), or by replacing aging residential buildings with new ones of a higher density (e.g., replacing a detached home with a fourplex, or townhomes with an apartment building).

Accordingly, the land requirements model uses an intensification allowance of 15% in alignment with the Town's own municipal planning policies.

4.3 AVERAGE HOUSEHOLD SIZE

An average household size assumption is used to translate estimated annual population growth into dwelling units, which then are used to calculate the amount of land required to accommodate them. According to the 2021 Census of Population, Stony Plain had a population of 17,993 and a total of 7,475 private dwellings. This means that the average household size in 2021 was 2.41 persons per dwelling.

Average household size may vary over time due to the sociodemographic changes of a community. However, since such changes are difficult to predict in the long-term, the land requirements analysis used an average household size of 2.41 and assumes that it is maintained through the end of the 50-year horizon.

4.4 RESIDENTIAL DENSITY

As mentioned above, once annual population growth has been translated into an estimated number of new dwelling units, this metric can be used to calculate the amount of residential land required. The key to moving from dwelling units to land requirements is the residential density assumption. The lower the density, the higher the land consumption will be, and vice versa.

Notably, this residential density assumption applies only to the remaining unabsorbed residential land supply, and not to the currently built-up urban area. The latter is already covered through the residential intensification allowance discussed in **Section 4.2**.

To determine a residential density assumption, both planned densities (i.e., approved plans) and MDP greenfield density targets must be considered.

4.4.1 Unabsorbed Residential Land Supply (Planned Areas)

The Town has 14 approved ASPs with residential lands that remain unabsorbed as of 2025. The key details of all 14 ASPs are summarized in **Table 4.2**. Notably, the Deerfield ASP and two sub-areas within the Southeast ASP have an incalculable planned residential density and thus are not considered in the totals.

As presented in **Table 4.1**, the weighted average planned residential density for unabsorbed lands within approved ASPs is 23.3 dwelling units per net residential hectare (du/nrha). This residential density applies to 852.6 gdha of unabsorbed lands remaining within residential areas subject to an ASP.

The unabsorbed residential land supply in the town also includes lands that are designated for future residential growth but are not yet subject to an ASP. These lands will be required to meet the minimum greenfield residential density target of 35 du/nrha established by the MDP. This target applies to the 155.6 gdha of unabsorbed residential lands not yet subject to an ASP.

Table 4.2 Stony Plain's Previously Planned Residential Densities

ASP Name	Sub-Area	Net Residential Hectare (nrha)	Dwelling Units (du)	Density (du/nrha)
Aspen Meadows		54.2	1,493	27.5
Country Plains Estates		31.6	376	11.9
Deerfield		131.6	unknown	unknown
East Boundary		46.3	1,154	24.9
Edgeland Park		35.0	1,165	33.3
Fairways North		10.6	279	26.4
Genesis on the Lakes		30.8	542	17.6
Lake Westerra Estates		57.6	875	15.2
Parkland Gateway	Area A	9.9	422	42.6
	Area B	11.1	888	80.0
South Creek		37.2	770	20.7
Southeast	High Park	unknown	unknown	unknown
	Home Acres	49.6	unknown	unknown
	Sommerville	17.7	416	23.5
The Brickyard at Old Town		35.5	949	26.7
Tussic		61.4	2,152	35.0
Willow Park		20.5	367	17.9
Total		**509.0**	**11,848**	**23.3**

Table 4.3 summarizes the density assumptions applicable to planned residential areas. The weighted average residential density for the total unabsorbed residential land supply (1,008.2 gdha) is 25.1 du/nrha, which is the assumption used by the land demand model for the purposes of calculating future residential land requirements.

Table 4.3 Planned Residential Areas Density Assumptions

Planned Area Type	Total Area (gdha)	Applicable Density (du/nrha)
Subject to an approved ASP	852.6	23.3
Subject to the MDP	155.6	35.0
Total	**1,008.2**	**25.1**

4.4.2 Future Urban Development (Unplanned Areas)

The land requirements model also estimates the amount of land needed beyond the available unabsorbed land supply. As discussed in **Chapter 2**, the town has 612.2 gdha of land designated in the MDP as FUD. These lands are also unabsorbed but have not been allocated to a core land use and thus are not being considered part of the gross developable unabsorbed land supply. Instead, they serve as a land reserve the Town can use before considering land requirements beyond its current boundary.

Though not yet planned, FUD lands will be subject to the minimum residential density required by the MDP, similar to those areas described in **Section 4.4.1**.

Thus, the land demand model uses a residential density assumption of 35 du/nrha for the purpose of calculating the amount of FUD lands required if and when the unabsorbed residential land supply is exhausted.

4.5 NET DEVELOPABLE OVERHEADS

Net developable overheads are land uses required to support or service residential, commercial, industrial, and public service development, including schools, parks, and open space (corresponding to municipal reserve dedications); public utilities, including stormwater management facilities and lift stations, among others; and circulation, encompassing local roads, collector roads, lanes, and walkways. The Municipal Government Act (MGA) allows for the maximum dedication of developable lands for these overheads to be 40% – comprising a maximum of 10% municipal reserve (schools, parks, and open space) and 30% public utilities and circulation.

4.5.1 Residential Areas

The land requirements model assumes that 40% of the town's gross developable land needs for future residential growth will accommodate the necessary net developable overheads. This 40% deduction assumes 10% for schools, parks, and open space (municipal reserve); 7.5% for public utilities; and 22.5% for circulation. This assumption is based on MGA regulations and the land supply analysis presented in **Chapter 2**.

4.5.2 Non-Residential Areas

The land requirements model assumes that 35% of the town's gross developable land needs for future non-residential (commercial, industrial, and public service) growth will accommodate the necessary net developable overheads. This 35% deduction assumes 10% for schools, parks, and open space (municipal reserve); 7.5% for public utilities, and 17.5% for circulation. This assumption is based on MGA regulations and the land supply analysis presented in **Chapter 2**.

The primary distinction between the net developable overhead assumptions for residential and non-residential development relates to the proportion of gross developable land allocated to circulation. The land supply analysis presented in **Chapter 2** indicates that circulation currently comprises approximately 26.7% of the town's absorbed developable land, which is higher than the typical Alberta municipal average of approximately 20%. This elevated proportion is partly attributable to the presence of two provincial highways (Highway 16A and Highway 779) that traverse the town in both east–west and north–south directions. While highways are often treated as undevelopable lands, they are captured within the circulation category for the purposes of this analysis, thereby inflating the overall circulation share. When these highways are excluded, the proportion of land dedicated to circulation aligns more closely with provincial norms.

Accordingly, a circulation assumption of 22.5% is applied to future residential development. Non-residential areas, which generally require less internal road and lane infrastructure, apply a lower circulation assumption of 17.5%. When considered together, these assumptions result in an overall circulation allocation that remains consistent with typical municipal benchmarks.

4.6 RELATIONSHIPS BETWEEN RESIDENTIAL AND OTHER CORE LAND USES

The absorbed land supply was further analyzed to identify existing relationships between absorbed urban residential lands and other core land uses:

- For every 100 ha of absorbed net urban residential lands, there are 20.8 ha of absorbed net commercial lands;
- For every 100 ha of absorbed net urban residential lands, there are 38.3 ha of absorbed net industrial lands; and
- For every 100 ha of absorbed net urban residential lands, there are 12.4 ha of absorbed net public service lands.[6]

[6] Public service lands do not include school sites, as these are accounted for in the schools, parks and open space net developable overhead.

For baseline land requirements calculations, the above relationships are carried forward to calculate future commercial, industrial, and public service land requirements based on future residential land requirements. These relationship assumptions are applied after allocating a portion of the future residential land requirements to intensification to acknowledge that intensification can occur among absorbed commercial, industrial, and public service lands as well.

4.7 MARKET ALLOWANCE

When determining land requirements to accommodate projected residential, commercial, and industrial growth, ultimately there will be lands within future growth areas in which development will not occur within the horizon of a forecast period. In recognition of this, it is sometimes appropriate to apply a market allowance as an overhead that:

- recognizes that some land within future growth areas will not develop within the 50-year horizon of this study (e.g., landowners either will not develop or sell to developers, whether they own full quarter sections or smaller parcels); and
- encourages fair market competition among developers that are participating in development.

However, the primary purpose of this study is not to secure or justify an expanded long-term land supply, but rather to establish a transparent and repeatable modelling approach that the Town can use to support ongoing municipal planning discussions. From this perspective, the application of a market allowance is not strictly necessary to maintain the internal consistency or accuracy of the land requirements model. As such, no market allowance has been applied in this analysis. The ability to apply a market allowance, should it become relevant under different policy conditions, is instead embedded within the Land Use Planning Framework developed as part of this project.

Where a market allowance is applied in future scenario testing, a value of approximately 10% could be considered to increase gross residential, commercial, and industrial land requirements. This allowance reflects the reality that, within a 50-year planning horizon, some parcels within designated growth areas may not be developed despite changes in ownership. While many parcels are likely to experience at least one ownership transition over this period, there is no certainty that subsequent owners will pursue development, and in some cases, parcels may change hands multiple times before development occurs. Incorporating a market allowance under such circumstances provides flexibility to account for market dynamics and supports competitive development conditions without overstating immediate land needs.

4.8 SUMMARY

Table 4.4 presents a summary of growth assumptions.

Table 4.4 Growth Assumptions Summary

Growth Assumption	Value
2025 Population	19,769
2076 Population	65,643
Intensification Allowance	15%
Average Household Size	2.41
Residential Density – Unabsorbed Residential Land Supply	25.1 du/nrha
Residential Density – Future Urban Development	35 du/nrha
Residential Overheads	40%
Parks and Open Space	*10%*
Public Utilities	*7.5%*
Circulation	*22.5%*
Non-Residential Overheads	32.5%
Parks and Open Space	*10%*
Public Utilities	*7.5%*
Circulation	*15%*
Net Commercial to Residential Ratio	20.8%
Net Industrial to Residential Ratio	38.3%
Net Public Service to Residential Ratio	12.4%
Market Allowance	0%

[7] Including overhead uses to support both residential and non-residential areas.

Based on these assumptions, for every 100 nrha absorbed, the Town will require:

- 20.8 net commercial ha;
- 38.3 net industrial ha;
- 12.4 net public service ha; and
- 63.3 ha of overhead uses[7], including:
  - 17.2 ha for parks and open spaces,
  - 12.9 ha for public utilities, and
  - 33.2 ha for circulation.

Accordingly, the absorption of 100 nrha would result in a total land requirement of 234.8 gdha. In practical terms, 100 nrha can accommodate:

- 251 dwellings and 605 residents within the unabsorbed land supply; or
- 350 dwellings and 844 residents within FUD lands.

With a gross unabsorbed residential land supply of 1,008.2 gdha (equivalent to approximately 604.9 nrha), these lands have the capacity to accommodate up to 15,187 dwellings and 36,600 residents. This capacity is in addition to the town's 2025 baseline of 8,203 dwellings and 19,769 residents, as well as the 15% intensification allowance, which represents an additional 4,128 dwellings and 9,947 residents at full build-out of the unabsorbed land supply.

5.0 Land Demand Modelling

This section applies the growth assumptions described in **Chapter 4** to quantify how much land Stony Plain may require to accommodate anticipated growth.

5.1 METHODOLOGY

Using geostatistical modelling, this analysis estimates future demand across residential, commercial, and industrial land uses[8] and compares these needs with the existing land supply. This modelling forms the analytical bridge between what the Town has today and what it may require in the future.

The horizon of this analysis is 50 years (2026-2076), using 2025 as a baseline. However, the Town has requested that population milestones be prioritized over exact years, due to the uncertainty associated with population projections. Accordingly, the model and results presented in this report are based on such milestones.

The projected population for 2076 is 65,643. Accordingly, the analysis in this section is based on a population milestone of 65,000.

Additional milestones are included, with corresponding reference years derived from the High Growth Scenario in the Town of Stony Plain Population and Employment Forecast. These reference years may shift over time as growth patterns evolve.

The model assumes that 100% of annual land requirements by land use category are first accommodated within the gross developable unabsorbed land supply. Once this supply is exhausted, land demand is allocated to areas currently designated as FUD.

As FUD lands have not yet been planned, the proportion of land allocated to each core land use is unknown. For modelling purposes, FUD lands were allocated as follows:

- 252.2 gdha (41.2%) for residential development
- 125.8 gdha (20.5%) for commercial development
- 234.2 gdha (38.3%) for industrial development

These allocations are optimal to balance the unabsorbed land supply, which is skewed towards residential uses (75.9%) and does not have sufficient commercial and employment lands to carry forward the existing residential to commercial and residential to industrial relationship in accordance with the growth assumptions (see **Section 4.6**).

[8] Public service land requirements are embedded in residential, commercial and industrial land requirements.

5.2 50-YEAR LAND REQUIREMENTS

As summarized in **Table 5.1**, accommodating growth to a population milestone of 65,000 residents requires 1,732.6 gdha, based on the recommended High Growth Scenario and the growth assumptions outlined in **Chapter 4**.

As noted in **Chapter 2**, the Town currently has 1,327.6 gdha of gross developable unabsorbed land supply, including lands planned through approved ASPs and lands designated for residential or employment development in the MDP.

At the 65,000-resident milestone, the entirety of the unabsorbed land supply would be consumed, creating an apparent shortfall of 404.9 gdha. However, this additional requirement can be accommodated within the Town's FUD land reserve. Of the total 612.2 gdha of FUD lands available, only 404.9 gdha (66.1%) would be required, leaving approximately 207.3 gdha remaining.

Accordingly, even under the recommended High Growth Scenario, the Town does not require land beyond its current municipal boundary to accommodate projected 50-year growth. Sufficient capacity exists within the remaining unabsorbed lands and the FUD reserve to meet long-term land needs.

Table 5.1 Future Land Requirements at 65,000 Residents (50-Year Horizon)

Land Use[9]	Total Gross Developable Land Requirements (gdha)	Unabsorbed Land Requirements (gdha)	Remaining Unabsorbed Land Supply (gdha)	Future Urban Development Land Requirements (gdha)	Remaining Future Urban Development Land Supply (gdha)	Beyond Boundary Land Requirements
Residential	1,152.6	1,008.2	0	144.4	107.8	0
Commercial	213.6	121.9	0	91.8	34.0	0
Industrial	366.4	197.6	0	168.8	65.4	0
Total	**1,732.6**	**1,327.6**	**0**	**404.9**	**207.2**	**0**

[9] Public service land requirements are distributed as follows: 80% to residential, 15% to commercial, and 5% to industrial land use areas.

5.3 LAND SUPPLY DEPLETION

Table 5.2 estimates the rate of depletion of both the unabsorbed and FUD land supplies based on total land requirements at each population milestone.

The unabsorbed land supply is projected to be depleted at the 55,000 population milestone (2068). The FUD land reserve would be exhausted shortly after the Town reaches a population of approximately 75,000 (2082), at which point additional lands beyond the current municipal boundary would be required.

While **Table 5.2** presents total land requirements only, depletion occurs at different rates by land use:

- The unabsorbed industrial land supply is the first to be depleted, at the 45,000 population milestone (2060).
- The unabsorbed commercial land supply is depleted at the 50,000 population milestone (2064).
- The unabsorbed residential land supply is depleted at the 60,000 population milestone.

Collectively, the absorbed, unabsorbed, and FUD land supplies provide sufficient capacity to accommodate a population of approximately 70,000. At this point the unabsorbed land supply will be fully exhausted, and there will be approximately 54.8 gdha of FUD land remaining.

Table 5.2 Land Supply Depletion by Population Milestone

Population Milestone (Year)	Total Gross Developable Land Requirements (gdha)	Unabsorbed Land Requirements (gdha)	Remaining Unabsorbed Land Supply (gdha)	Future Urban Development Land Requirements (gdha)	Remaining Future Urban Development Land Supply (gdha)	Beyond Boundary Land Requirements
25,000 (2035)	200.4	200.4	1,127.3	0	612.2	0
30,000 (2043)	391.9	391.9	935.7	0	612.2	0
35,000 (2049)	583.4	583.4	744.2	0	612.2	0
40,000 (2055)	775.0	775.0	552.7	0	612.2	0
45,000 (2060)	966.5	959.7	368.0	6.8	605.4	0
50,000 (2064)	1,158.0	1,089.8	237.8	68.2	543.9	0
55,000 (2068)	1,349.5	1,217.2	110.4	132.3	479.8	0
60,000 (2072)	1,541.1	1,327.6	0	213.4	398.7	0
65,000 (2076)	1,732.6	1,327.6	0	404.9	207.2	0
70,000 (2079)	1,885.0	1,327.6	0	557.4	54.8	0
75,000 (2082)	2,023.3	1,327.6	0	608.2	3.9	84.7
80,000 (2084)	2,161.5	1,327.6	0	612.2	0	221.7

6.0 Recommendations

The Land Absorption Study provides an evidence-based foundation to support the Town of Stony Plain's upcoming MDP review and related growth management decisions.

While this study does not prescribe specific policy directions, the findings highlight several strategic considerations that can help guide responsible, efficient, and adaptable growth over the long term. The following recommendations are intended to inform policy discussions during the MDP update and to support alignment between land supply, housing objectives, infrastructure planning, and market realities.

Maintain a clear distinction between planned lands and land reserves

The analysis confirms that the Town has sufficient capacity within its existing municipal boundary to accommodate long-term growth, including through lands designated as FUD. As part of the MDP update, the Town should consider maintaining a clear policy distinction between:

- lands that are actively planned and intended for near- to medium-term development; and
- lands that function as a longer-term reserve to be unlocked as growth pressures emerge.

Maintaining this distinction could continue to support orderly growth and allow the Town to better manage infrastructure investment timing.

MDP Approach to Future Urban Development Lands

Under the growth assumptions applied in this study, there is no immediate need to unlock Future Urban Development (FUD) lands, as the existing unabsorbed land supply provides sufficient capacity to accommodate growth to approximately 55,000 residents.

However, land adequacy varies by use. While the unabsorbed residential supply (75.9% of the total unabsorbed lands) can accommodate growth to approximately 60,000 residents (2072), the unabsorbed industrial and commercial land supplies are projected to be depleted much earlier, at approximately 45,000 residents (2055).

Accordingly, although additional FUD lands do not need to be necessarily enabled at this time, any consideration of advancing FUD planning through the upcoming MDP update should prioritize employment uses over residential development to maintain long-term land use balance and a sustainable assessment split.

Use population thresholds to guide land sequencing decisions

The land demand modelling demonstrates that land supply depletion aligns more meaningfully with population milestones than with fixed calendar years. The MDP update provides an opportunity to explicitly link planning and development sequencing as well as servicing strategies to population thresholds rather than rigid timelines. This approach supports flexibility in responding to fluctuating growth rates while maintaining long-term development readiness.

Confirm residential density and intensification targets

The study highlights the significant influence that residential density and intensification assumptions have on long-term land consumption. During the MDP review, the Town could confirm its commitment to:

- minimum greenfield residential density targets; and
- aspirational intensification objectives within the existing urban area.

Clear policy direction on these matters will help manage land consumption, support housing diversity, and reduce pressure to expand the town's land base prematurely, especially in the absence of the former Edmonton Metropolitan Region Board and its Edmonton Metropolitan Region Growth Plan.

Coordinate planning for residential and employment growth

The analysis demonstrates strong historical relationships between residential growth and the demand for commercial, industrial, and public service lands. The MDP update should continue to plan employment lands in coordination with residential growth, ensuring that sufficient opportunities exist to support local jobs, services, and assessment balance. This not only refers to the quantity of land, but also to its spatial distribution.

Preserve flexibility to respond to market conditions

While a market allowance was not applied in this study, the analysis acknowledges that not all lands within growth areas will develop uniformly or within expected timeframes. The Town should retain flexibility to respond to changing ownership patterns, market conditions, and development readiness, including through the Land Use Planning Framework, which allows for scenario testing and fluid assumptions about land uptake.

Integrate land absorption monitoring into ongoing land use planning

Finally, the Town is encouraged to treat land absorption as an ongoing monitoring exercise rather than a one-time study. Leveraging the Land Use Planning Framework delivered separately as part of this project, the Town will be able to conduct regular updates to its land supply inventory, absorption rates, and growth assumptions. This will support performance tracking over time and inform decisions to adjust land use policy as needed.